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President's Report
by
Livingston Farrand
for 1931-32

With appendices containing a summary of
financial operations, and reports of
the Deans and other officers

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REPORT OF THE PRESIDENT

FOR 1931-32

To the Board of Trustees of Cornell University:

I have the honor to present the following preliminary report on the progress of the University during the academic year 1931-32.

The University has suffered serious loss by death of the following distinguished figures:

Walter P. Cooke, a Trustee of the University, died in Buffalo, August 4, 1931. He was elected by the Board in 1917 to succeed George C. Boldt, deceased, and served continuously until the time of his death. Since October 1921 he had been a member of the Finance Committee.

George T. Elliott, Professor of Clinical Medicine, Emeritus, Department of Dermatology, died September 14, 1931. He had been Professor of Clinical Medicine, Department of Dermatology, from the opening of the Medical College in New York in 1898 until he retired from active service in 1920.

George S. Moler, Professor of Physics, Emeritus, died May 20, 1932. He had been on the staff of the Physics Department since 1875, first as instructor in that subject. In 1880 he was appointed to an assistant professorship and in 1911 was promoted to a full professorship. He retired from active service in 1917.

Lucius L. Van Slyke, Professor of Dairy Chemistry, Emeritus, died September 30, 1931. He had been a member of the staff of the State Experiment Station at Geneva, New York, and was appointed Professor of Dairy Industry in 1919 when the station became allied with the College of Agriculture at Cornell. In 1923 he was appointed Chief in Research (Chemistry) in that station with the title of Professor. He retired from active service in 1929.

Martha Van Rensselaer, Professor of Home Economics and Director of the State College of Home Economics, died May 26, 1932. She came to Cornell as a Nature Study Worker in 1901. In 1903 she was appointed Supervisor of the Farmers' Wives Reading Course and in 1907 received the title of Lecturer in Home Economics. In 1911 she was elected Professor of Home Economics and in 1922 was also

given the title of State Leader of Home Economics Extension. In 1924 she became Director of the School of Home Economics and a year later, when the name of that institution was changed, Director of the College of Home Economics.

Arthur H. Cilley, Assistant Professor of Surgery and Chief of Clinic, Department of Orthopedic Surgery, died May 31, 1932. He had been a member of the staff of Orthopedic Surgery since 1913, first as clinical instructor and since 1921 as assistant professor.

Morgan P. Sweeney, Associate in Research (Chemistry) in the Experiment Station at Geneva, with the title of Assistant Professor, died August 6, 1931.

Robert M. Adams, Extension Assistant Professor of Vegetable Crops, died December 12, 1931.

Arthur W. Lee, Instructor in Machine Design since 1929, died January 7, 1932.

J. Thorn Willson, Business Manager of the Medical College, died January 30, 1932. He had been connected with the Medical College since its establishment in 1898.

THE TRUSTEES

At the meeting of the Board held in the autumn of 1931 August Heckscher was elected a Trustee of the University to fill the unexpired term of George F. Baker, who died in May 1931, and Martin J. Insull of the Class of 1893 was elected to the trusteeship left vacant by the death of Walter P. Cooke.

Peter G. TenEyck was reappointed a Trustee by the Governor for a five-year term.

Charles H. Baldwin was reelected President of the New York State Agricultural Society for the year 1932 and so continued to be an ex officio Trustee for that period; and on July 1, 1932 he succeeded Berne A. Pyrke as State Commissioner of Agriculture and Markets and hence became an ex officio Trustee in that capacity also.

The University Faculty in December elected George Young, Jr., as its representative on the Board for a term of three years to succeed Herman Diederichs whose term expired December 31, 1931.

At the meeting of the Board held on June 20, 1932, Trustees Robert H. Treman and Mynderse VanCleaf were elected to succeed themselves on the expiration of their respective terms. The term of Jared T. Newman also expired in June 1932 and he requested that

he be not reelected. The Board regretfully accepted his decision in the matter and the trusteeship held by him has not yet been filled.

The Alumni of the University elected Dr. Mary M. Crawford to succeed herself for a term of five years and elected Archie C. Burnett of the Class of 1890 to fill the alumni trusteeship left vacant by the expiration of the term of S. Wiley Wakeman.

Stanton Griffis was elected to the place on the Finance Committee left vacant by Mr. Cooke's death.

Mynderse VanCleaf was elected to succeed himself as a member of the Committee on General Administration.

Robert H. Treman was elected to succeed himself on the Committee on General Administration, the Finance Committee, the Committee on Buildings and Grounds, and the Graduate School Council.

Dr. Crawford was elected to succeed herself on the State College Council.

H. H. Westinghouse and Walter C. Teagle were elected to succeed themselves on the Medical College Council.

The places on the Committee on Buildings and Grounds left vacant by the retirement of Trustees Newman and Wakeman were left unfilled until the autumn meeting of the Board, as were also the places on the State College Council and the Library Council left vacant by Mr. Newman's retirement.

Dwight Sanderson and J. E. Butterworth were elected representatives of the College of Agriculture on the State College Council to fill the places formerly held by Louis M. Massey and Frank B. Morrison. Flora Rose was elected representative of the College of Home Economics in succession to Martha Van Rensselaer.

James Lynah of the Class of 1905 was elected to membership on the Engineering College Council in place of James H. Edwards, deceased.

THE FACULTY

The following appointments and promotions have been made during the year.

Cornelius Betten, Dean of the University Faculty.

C. E. Ladd, Dean of the New York State College of Agriculture and New York State College of Home Economics, and general Director of the Agricultural Experiment Stations.

W. A. Hagan, Dean of the New York State Veterinary College.

Flora Rose, Director of the New York State College of Home Economics.

L. M. Dennis, Professor of Inorganic Chemistry, Emeritus.

C. H. Hull, Professor of American History, Emeritus.

A. C. Gill, Professor of Mineralogy and Petrography, Emeritus.

C. A. Martin, Professor of Architecture, Emeritus.

Nathaniel Schmidt, Professor of the Semitic Languages and Literatures and Oriental History, Emeritus.

C. L. Dana, Professor of Clinical Medicine, Department of Neurology, Emeritus.

C. L. Gibson, Professor of Surgery, Emeritus.

Graham Lusk, Professor of Physiology, Emeritus.

William L. Russell, Professor of Psychiatry, Emeritus.

K. M. Dallenbach, Professor of Psychology.

Lt. Col. J. J. Fulmer, Professor of Military Science and Tactics (detailed to the University by the War Department).

Katherine W. Harris, Professor of Home Economics.

H. K. Hayes, Acting Professor of Plant Breeding.

C. C. Murdock, Professor of Physics.

C. N. Stark, Professor of Bacteriology.

Ellwood Wilson, Acting Professor of Silviculture.

John Courtney, Assistant Professor of Hotel Accounting.

W. A. J. Ewald, Assistant Professor of Architecture.

E. S. Harrison, Assistant Professor of Animal Husbandry.

E. M. Hildebrand, Assistant Professor of Plant Pathology.

Edwin Nungezer, Assistant Professor of English.

P. D. Peterson, Acting Assistant Professor of Plant Pathology.

Alexis Romanoff, Research Assistant Professor of Poultry Husbandry.

L. P. Smith, Assistant Professor of Physics.

E. V. Staker, Assistant Professor of Soil Technology.

J. N. Tilton, Jr., Assistant Professor of Architecture.

In the Medical College in New York City the following have been appointed or promoted:

N. Chandler Foot, Professor of Surgical Pathology.

Nellis B. Foster, Professor of Clinical Medicine.

J. Frank Fraser, Professor of Clinical Medicine.

Henry H. M. Lyle, Professor of Clinical Surgery.

Eugene H. Pool, Professor of Clinical Surgery.

Joseph C. Roper, Professor of Clinical Medicine.

William R. Williams, Professor of Clinical Medicine.

James A. Harrar, Associate Professor of Clinical Obstetrics and Gynecology.

G. W. Henry, Associate Professor of Psychiatry.

H. B. Richardson, Associate Professor of Medicine.

H. J. Stewart, Associate Professor of Medicine.

Harry M. Tiebout, Associate Professor of Psychiatry.

J. Lionel Alloway, Assistant Professor of Bacteriology and Immunology.

C. A. Binger, Assistant Professor of Clinical Medicine (Psychiatry).

Edward Cussler, Assistant Professor of Clinical Medicine.

R. Gordon Douglas, Assistant Professor of Obstetrics and Gynecology.

Seward Erdman, Assistant Professor of Clinical Surgery.

Phyllis Greenacre, Assistant Professor of Clinical Psychiatry.

C. Frederic Jellinghaus, Assistant Professor of Clinical Obstetrics and Gynecology.

Cornelius V. Kilbane, Assistant Professor of Radiology.

W. S. Ladd, Assistant Professor of Clinical Medicine.

Paul Reznikoff, Assistant Professor of Medicine.

Henry J. Spencer, Assistant Professor of Clinical Medicine.

Lewis D. Stevenson, Assistant Professor of Clinical Neurology.

John A. Vietor, Assistant Professor of Clinical Surgery.

Bruce Webster, Assistant Professor of Medicine (Psychiatry).

Sydney Weintraub, Assistant Professor of Clinical Radiology.

Jay D. Whitham, Assistant Professor of Clinical Surgery (Otolaryngology).

May G. Wilson, Assistant Professor of Clinical Pediatrics.

Lucius A. Wing, Assistant Professor of Clinical Obstetrics and Gynecology.

Wallace Lund, Business Manager of the Medical College.

The following appointments have been made in the Extension Staff of the State Colleges:

Ernest Van Alstine, Extension Professor of Agronomy.

J. T. Bregger, Acting Extension Assistant Professor of Pomology.

H. J. Brueckner, Extension Assistant Professor of Dairy Industry.

G. J. Raleigh, Acting Extension Assistant Professor of Vegetable Crops.

In the Agricultural Experiment Station at Geneva the following have been appointed:

H. G. Beatty, Associate in Research (Chemistry) with the title of Assistant Professor.

W. D. Enzie, Associate in Research (Vegetable Crops) with the title of Assistant Professor.

G. L. Mack, Associate in Research (Chemistry) with the title of Assistant Professor.

Since a Director of the School of Civil Engineering has not yet been elected, the following have been appointed an Administrative Committee for that School for the year 1932-33: Professor P. H. Underwood, Chairman, and Professors S. L. Boothroyd and H. N. Ogden.

Bronislaw Malinowski, Professor of Anthropology in the London School of Economics (University of London), has been appointed Lecturer on the Messenger Foundation for the academic year 1932-33. His subject will be "The Development of Culture" with a sub-title "An Enquiry into the Function, Origins and Evolution of Human Beliefs, Customs and Social Organization."

Professor Otto Hahn of the Kaiser Institut für Chemie, Berlin-Dahmen, Germany, will be non-resident Lecturer in Chemistry on the George F. Baker Foundation for the second term of 1932-33. During the first term of that year the lectureship will be vacant.

The following have presented their resignations:

J. W. Beacham, Jr., Professor of Military Science and Tactics, whose detail at Cornell University by the War Department terminated in the summer 1932.

S. N. Spring, Professor of Silviculture.

H. E. Thomas, Assistant Professor of Plant Pathology.

E. L. Green, Associate in Research (Chemistry) with the title of Assistant Professor.

A. F. Coca, Professor of Immunology.

J. S. Denton, Assistant Professor of Pathology.

J. M. Hitzrot, Professor of Clinical Surgery.

Alexander Lambert, Professor of Clinical Medicine.

Elise S. L'Esperance, Assistant Professor of Pathology.

O. H. Schultze, Professor of Medical Jurisprudence.

A. S. Taylor, Professor of Clinical Surgery.

THE STUDENTS

The official enrollment of students for the year ending June 30, 1932, was 6,271 as compared with 6,246 for the previous year.

In September 1931 there were admitted to the several undergraduate colleges directly from secondary institutions 1,355 students out of 2,531 who filed formal applications for admission as regular students. There were admitted by transfer with credit toward advanced standing 249 out of 565 who applied. Altogether 1,604 were admitted out of 3,096 who made formal application. The geographical distribution of applicants for admission to the undergraduate colleges in September 1931 included 46 American states, four outlying American possessions, and twenty foreign countries.

During the year 1931-32, 1,021 first degrees were conferred and 376 advanced degrees; of these latter 133 were Doctors of Philosophy.

THE COLLEGE OF ARCHITECTURE

The student enrollment for last year in the College of Architecture was slightly less than in the preceding year and about 10 per cent less than the annual average for the period 1927-30. The decline was not in the freshman class but in the later years and is attributed largely to lack of financial resources of the students. The College would particularly welcome an increased enrollment in Landscape Architecture and Fine Arts. In both those fields there is definite need for a limited number of undergraduate scholarships and a strongly indicated need for graduate fellowships.

There has been a notable development during the year in cooperation with other colleges of the University in educational offerings in Fine Arts. Specifically, Professor Bosworth has offered two courses in the Theory of Design, one for students in Engineering and one for students in Arts and Sciences. Interest in the courses in the History of Art has attained new levels and the place for this instruction seems to be definitely established.

For the past three years the Colleges of Engineering and Architecture have jointly sponsored a course of lectures on city and regional planning. The student response has been excellent, revealing an eager and sustained interest in these subjects. While at times the suggestion has been urged that Cornell should enter the field of city and regional planning on a professional basis, and the Faculty of Architecture is desirous of extending its service in this field, it does not favor the introduction of a professional program.

ARTS AND SCIENCES

The interest of the Faculty of Arts and Sciences has been especially engaged in the revision of requirements leading to the adoption of a new curriculum. Probably the most essential feature of the provision is a modification and expansion of the requirements of the student's major group. The new plan abolishes the distinction between underclass and upperclass requirements, enabling a student to begin his major work in the sophomore year and requiring that it shall be of a more comprehensive character than hitherto.

The significance of this departure from the previous practice lies in the increased responsibility assumed by the departments in integrating their courses with those related to them in other departments, together with an undertaking to provide the student with a more flexible and comprehensive program of study from the sophomore year onward to the completion of his college course.

The plan for unsupervised informal study with which the College has recently experimented has been discontinued and at the same time the provision for supervised informal study has been broadened so as to become a regular part of the major program of a student's course. The faculty of the College has also taken steps to make more definite its advisory system for freshmen through the setting up of a distinct group of freshmen advisers.

The release of Boardman Hall by the Law School and its allocation to this College as a new home for History and Government brings a welcome and long awaited relief to such of the departments as may be affected by the readjustments.

ENGINEERING

The industrial depression has not as yet seriously affected enrollment in the College of Engineering but there are many indications of financial distress among the students and particularly among those of the upper classes. The availability of the McMullen Fund for scholarship assistance affords important relief. The growth of this fund has been noteworthy, the invested capital now exceeding \$500,000.

An important educational development of the year was the beginning of the professional course in Administrative Engineering leading to the degree of Bachelor of Science in Administrative Engineering. Already fifty members of the sophomore class have registered for the new course.

During the year the faculty of the College has given special attention to the graduate work of the College in an effort to raise the standards of work and to relate the members of the faculty of Engineering more intimately to the control and guidance of graduate study.

THE LAW SCHOOL

Last June the Law School completed its fortieth year of occupancy of Boardman Hall and during that month moved to the new quarters provided for it in Myron Taylor Hall. This Hall, which is to be dedicated on October 15th with Mr. and Mrs. Taylor present and the main address to be given by Chief Judge Pound, gives to the Law School a physical equipment generous in size, ideal in arrangement and beautiful in detail. The 1932 Summer Session in Law opened in Myron Taylor Hall in June.

The Law School instituted this year comprehensive examinations for third year students covering the entire work of the course. The examination consisted of a special library problem covered by a written report and an oral examination by a committee of three members of the faculty. At the end of the year the third year students took a written examination extending over four days and covering the work of the course. Much satisfaction is expressed by the faculty with the results of this first experiment.

In view of the enlarged facilities of the new building the Law faculty has made an effort during the year to extend its sphere of influence to a wider group of universities and colleges throughout the east, south and middle west. As a result, by the middle of July there were fifteen per cent more perfected applications for admission to the first year class in Law than at the same time last year.

A short time ago graduate work in Law, leading to the J.S.D. and LL.M. degrees, was organized. During the next academic year there will be in residence five candidates for the Doctor's degree, one of whom will hold a teaching fellowship available for the year only.

The Law School, like other parts of the University, has felt a pressing need for loan funds for students. The bequest of \$50,000 by the distinguished alumnus and trustee, the late Walter P. Cooke, will help appreciably in meeting this situation. The Law School is also greatly encouraged by the gift of Mr. Mynderse VanCleaf toward the endowment of a fellowship in the Law School.

THE MEDICAL COLLEGE

The academic year 1931-32 marks the close of a chapter in the Medical College. It is the thirty-third year of the College, which began instruction in 1898 and has continued until the present to occupy the building at First Avenue between 27th and 28th Streets. The Medical College is to begin its next academic year in association with the New York Hospital, as with the completion of the new plant the New York Hospital-Cornell Medical College Association goes into actual operation, affecting profoundly both the Medical College and the Hospital. The College has moved into its new quarters during the summer. The new quarters provide magnificent facilities for every field of medical practice, research and teaching. The cordial relations with and cooperation of the New York Hospital should be especially emphasized, as the Hospital is making a conspicuous contribution in the field of medical education.

The year has witnessed many important changes in the faculty and the reorganization of the clinical departments. Major changes in the faculty are caused by the retirement of the heads of five departments because of age and the transfer of the head of another to a newly created department of the College. Professors Ewing, Lusk, Conner, Gibson, and Russell retire because of age and their successors have been appointed. Professors Dana, Lambert, and Schultze have also retired for age. For various reasons Professors Taylor, Hitzrot, and Coca and Assistant Professors L'Esperance and Denton have retired. Several of these retiring have been members of the teaching staff since the organization of the College and their active participation in its affairs will be greatly missed. This outstanding group has made conspicuous contributions not only to the University but to the entire field of medical education. These retirements and changes have involved heavy responsibilities in the selection of successors, but this task has been carried forward with success. Many new appointments in the clinical departments have been made in order to bring to the faculty members of the staff of the New York Hospital and the Lying-in Hospital. The reorganization of the clinical departments on a university basis has also necessitated a number of appointments to the faculty of teachers who are to devote their full time to the work of the College and of the Hospital.

During the year 1931-32 there were 241 student candidates for the degree of Doctor of Medicine, 60 of whom were granted the degree

at the last Commencement. All students of the first and second years in New York completed their work without failure or condition, a unique record in the College, indicative of the care and judgment exercised by the Committee on Admissions, as well as being a tribute to the character of the teaching.

The curriculum of the Medical College, which has been the subject of study during the past three years, has been materially altered. The changes affect essentially the instruction of the last two years of the course and are made possible by the greatly expanded facilities for clinical training provided by the New York Hospital.

The Cornell Clinic closed its activities on August 15th after ten years of successful operation. The principles of providing medical service for persons of moderate means successfully worked out in the medical clinic are to be incorporated in the out-patient department of the New York Hospital.

THE GRADUATE SCHOOL

The enrollment in the Graduate School has doubled since 1924 and still continues to increase. In the five years since 1926-27 the enrollment has increased 68 per cent. The distribution of this increase among the several fields of study is reasonably uniform. The increases in the humanities have compared favorably with those in the sciences.

During the academic year 1931-32 there were enrolled 1,139 students in the Graduate School. During the summer of 1931, 860 were enrolled. These students came from 44 states and the District of Columbia within continental United States, and 40 foreign countries and outlying possessions of the United States. They came from 291 American and foreign institutions.

In recent years the proportion of graduate students who are candidates for the Doctorate has steadily increased. In 1924 candidates for the Doctorate comprised 45 per cent of the graduate student body, whereas in 1931-32 they comprised 57 per cent. The rapid increase in the enrollment in this School has raised the question of possibly limiting admissions. As a first step the Graduate Faculty has made provision for a standing committee on admissions to scrutinize more closely applications for admissions, in collaboration with the members of the faculty most concerned in each case.

During the year the Trustees increased the tuition in the Graduate School from \$75 to \$150 a year, to which is to be added the annual administration fee of \$25. In connection with this action the Trustees created thirty tuition free scholarships in the Graduate School beginning with the year 1932-33. This provision is as wise as it is urgently needed. In due time it is hoped that the number of such scholarships may be increased. In this connection attention may again be called to the fact that the cash stipends carried by fellowships and scholarships in the Graduate School compare quite unfavorably with those available in many of the other large universities of the country.

THE STATE COLLEGES AND THE SUMMER SESSION

The developments in the State Colleges and the Summer Session will be found in the reports of the respective Deans and Directors.

UNIVERSITY LIBRARY

The Library situation reveals at once progress and serious problems. Perhaps the most pressing need for physical relief in the entire University is felt by the Library.

The assistance given to the Library by the special grant of \$5,000 through the Cornellian Council afforded an important relief in the cataloguing division especially, and in addition made possible the acquisition of many important works otherwise beyond the reach of the Library, the continuation of series which otherwise would have been dropped, and the filling in of gaps which would have remained open.

During the year the Library observed the centenary of the birth of Willard Fiske (November 11, 1931), who in 1868 became the first Librarian of Cornell. In addition to his services as Librarian, Mr. Fiske's contributions to the University of his remarkable Dante, Petrarch, and Icelandic collections and his significant gift toward the financial endowment of the Library made him an outstanding figure in connection with library development at this institution. The centenary of his birth was commemorated by a display of books and pictures taken in part from the Fiske collections.

During the year the total accessions to the University Library amounted to 15,154 volumes; to the Law Library, 1,964; and to the Library of the State Colleges of Agriculture and Home Economics

3,927. The total number of volumes in the general and special collections now totals 877,393. Many books, periodicals, and other items of exceptional interest and value are included among the accessions of the past year. As usual, the University is indebted to a large number of benefactors for gifts to the Library. The number of donors is 589 and they gave the University 6,486 items.

THE UNIVERSITY FACULTY

The appointment of Dr. Cornelius Betten as Dean of the University Faculty was made in June 1932. At the end of the year the number of the faculty resident in Ithaca was 406, of whom 17 were professors emeritus.

In the spring of the year legislation was passed changing the composition of the Committee on University Policy. Hitherto this Committee had been composed *ex officio* of executive officers of the University and of the several colleges. Hereafter the Committee will consist of the Dean of the University Faculty as chairman, the representatives of the Faculty in the Board of Trustees, and five members of the University Faculty who will be elected for five year terms. The functions of the Committee are broadly defined as "to recommend to this Faculty such legislation as the Committee may deem desirable and to report to this Faculty upon such matters as may from time to time be referred to the Committee by this Faculty."

GENERAL

I shall not undertake to present in detail at this time the general problems of the University. It is necessary, however, to call the attention of the Board of Trustees to the obviously grave problems presented by the financial situation in which the University finds itself. The necessary retrenchment throughout the University has involved sharp reduction in maintenance funds of departments and has left numerous vacancies unfilled, some of which are positions of major importance. There has also been a reduction in the number of instructors and assistants and a corresponding increased teaching load for members of the faculty. The entire University staff, however, has fully recognized the necessities of the times and is appreciative of the effort of the Board of Trustees to avoid a reduction in the salary scale. It is a pleasure to report a thoroughly cooperative spirit in all sections of the University and no loss of academic vigor as a result of the difficult conditions.

Respectfully submitted,

LIVINGSTON FARRAND, *President.*

SUMMARY OF FINANCIAL OPERATIONS

To the President of the University:

I have the honor to submit herewith the financial statement of Cornell University covering the fiscal year from July 1, 1931, to June 30, 1932, inclusive.

The net cost of conducting the endowed colleges at Ithaca during the year exceeded the income available for that purpose by \$184,478.19. This figure includes the reappropriation of unexpended balances necessarily continued to cover contracts made or under consideration, amounting to \$72,939.84. This amount added to the existing debit balance at the beginning of the year increased the accumulated deficit to \$446,417.74. While a portion of this overdraft was anticipated at the beginning of the year, the total was increased by additional appropriations found necessary and by a diminution in a number of items of estimated income. That the University staff practiced a rigid economy during the year is evidenced by the fact that approximately \$96,000 of appropriations made were saved and allowed to lapse. The University has also accumulated over the past few years a liability against future income of \$1,180,605.61, which sum has been expended for the purchase of property for its future needs, and for plans and studies in anticipation of building operations. These items have been temporarily financed from current credits and by borrowing from the endowment, and must eventually be met by gifts or appropriations from funds now treated as endowment, or from current income.

The available income of the Medical College in New York City, including the credit balance at the beginning of the year, exceeded the disbursements by \$158,345.31. This amount will be needed to meet the expenses incident to the moving of the college to the new location of the New York Hospital-Cornell Medical College Association.

The expenses of the State colleges at the University in excess of gifts for current use and certain income available from University and Federal funds are fully met from appropriations made by the State of New York.

THE UNIVERSITY ENDOWMENT

The permanent endowment or income producing funds of the University aggregate \$25,039,469.45, an increase during the year of \$120,441.43. Of these funds \$17,311,945.05 are for the benefit of the University at Ithaca, and \$7,727,524.40 for the Medical College in New York City.

The average rate of return actually received upon investments during the year and credited to the several funds was 4.989% as compared with 5.268% for the preceding year, and 5.523% in the year 1929-30. The average return for the ten preceding years was 5.431%. The decrease in the average rate of return is largely accounted for by a limited number of defaults of interest on bonds and mortgages held, and by the reduction in dividends on preferred and common stocks. The market values of the University's securities, in line with the values of securities throughout the world, have dropped below our book values by approximately 40%. Securities listed upon any recognized exchange are carried at the value there recorded, and mortgages and non-listed securities at the book value. The market value on June 30 was estimated at 60.566% of the book value of the total investment list. The diversification of the University's investments is shown in the following table.

	Bonds	Preferred Stocks	Common Stocks	Totals	Percent- age of Total
Municipal	\$ 912,521.64			\$ 912,521.64	3.49
Railroads	2,677,023.60	\$ 227,525.00	\$1,974,973.96	4,879,522.56	18.69
Public Utilities	1,848,877.54	1,156,367.50	925,021.85	3,930,266.89	15.06
Industrials:					
Tobacco	153,000.00	108,745.00	405,272.88	667,017.88	2.56
Steel	189,322.50	228,800.00	106,250.00	524,372.50	2.01
Merchandising	50,737.50	692,461.14		743,198.64	2.85
Manufacturing	1,289,023.71	1,634,576.65	696,734.08	3,620,334.44	13.87
Oil	244,180.75	138,135.87	1,190,794.74	1,573,111.36	6.03
Mining	68,343.75		185,530.00	253,873.75	.97
Holding Co. & Investment	249,556.25	194,475.00	29,050.00	473,081.25	1.81
Bank and Insurance			1,347,043.11	1,347,043.11	5.16
Real Estate Securities	3,448,527.50		510,000.00	3,958,527.50	15.17
Local Real Estate				573,558.00	2.20
Advances await- ing Income				396,792.98	1.52
Heat and Water Plants				914,945.91	3.50
Advances for Purchase, Con- struction and Maintenance				1,085,656.48	4.15
Cash				250,000.00	.96
	\$11,131,114.74	\$4,381,086.16	\$7,370,670.62	\$26,103,824.89	100.00

SEMI-CENTENNIAL ENDOWMENT FUND

The subscriptions (exclusive of gifts for special purposes, such as buildings which, under the resolution of the Board of Trustees, form part of the Semi-Centennial Endowment Fund) secured by the Semi-Centennial Endowment Committee aggregate: \$6,664,256.88.

From this amount there has been charged off as uncollectible:

By the Treasurer	\$111,343.17	
By the Cornellian Council (Classes 1920-23)	450,728.39	562,071.56
Leaving the net subscriptions July 1, 1932		\$6,102,185.32
Of these there have been collected.		4,222,444.25
Leaving the balance uncollected July 1, 1932		\$1,879,741.07

Of these uncollected subscriptions \$461,846.99 are from the Classes of 1920-23 inclusive, payable through the Cornellian Council and not yet due; \$1,171,032.71 are payable at the convenience of the donor; and \$38,962.49 are payable at definite dates which have not yet been reached. This leaves a balance of only \$207,898.88 of subscriptions which, by their terms, have matured but have not yet been paid. During the year, in addition to \$1,003.85 paid through the Cornellian Council, there was paid into the University on account of the principal of subscriptions \$26,369.49. Of this amount, \$610.68 was paid on account of principal maturing prior to the beginning of the year; \$4,403.56 on principal maturing during the year; and \$21,382.25 on account of subscriptions not yet matured or payable at convenience. Interest amounting to \$18,411.50 was collected. Sixteen extensions of time of payment were granted, and eighteen subscriptions were paid in full.

DONATIONS

Gifts to the University passing through the books of the Comptroller's and Treasurer's offices during the year aggregated \$573,252.63. Undoubtedly some gifts were made directly to departments and were not reported to us. In addition to the payments on account of subscriptions to the Semi-Centennial Endowment Fund as above mentioned, gifts were received from alumni through the Cornellian Council aggregating \$158,599.48. That the unrestricted gifts for use in meeting the University's current expenses were reduced only 25%, and the large payments made upon the Semi-Centennial subscriptions, are a remarkable evidence of the self-sacrificing activity of the Council and the continued loyalty of the alumni in this most difficult period. Other donations amounted to \$375,643.94.

THE PHYSICAL PLANT

During the year Myron Taylor Hall has been completed and furnished, and the summer session of the Law School was held therein. Mennen Hall dormitory, the gift of Mr. William G. Mennen of the Class of 1908, and of his sister, Mrs. Elma Mennen Williams, in memory of their parents, Mr. Gerald Mennen and Mrs. Elma C. Mennen, is nearing completion and will be ready for occupancy this fall. It will accommodate 36 men and is situated on the west side of West Avenue to the north of the War Memorial group.

The construction by the State of the new building for the College of Home Economics and the building for the Department of Agricultural Economics in the College of Agriculture has progressed steadily. The laboratory building at the New York State Experiment Station at Geneva is completed and occupied.

The visitor to the campus notices particularly the many minor changes which add so greatly to the attractiveness of the campus. These have been made possible in a large degree by the generous gifts of Colonel Sackett for the purpose of beautifying the campus and gorges.

The routine work of the administrative departments of the University has, I believe, been satisfactorily performed.

Respectfully submitted,

CHARLES D. BOSTWICK, Comptroller.

NOTE: The complete report of the Comptroller and the Treasurer, bearing the certificate of audit of Messrs. Scovell, Wellington & Co., Accountants-Engineers, 10 East 40th Street, New York City, together with the reports of the Superintendent of Buildings and Grounds, the Manager of Purchases, and the Manager of Residential Halls, will be forwarded to the members of the Faculty and Alumni upon receipt of specific request addressed to the Comptroller of Cornell University, Ithaca, New York.

APPENDIX I

REPORT OF THE SECRETARY OF THE UNIVERSITY FACULTY

To the President of the University:

SIR: I have the honor to submit the following report of the University Faculty for the year 1931-32:

FACULTY PERSONNEL

Since Commencement in 1931, five members of the University Faculty have died: Herbert Joseph Davenport, Professor of Economics, Emeritus; Lucius Lincoln Van Slyke, Professor of Dairy Chemistry, Emeritus; George Sylvanus Moler, Professor of Physics, Emeritus; Martha Van Rensselaer, Professor of Home Economics and Director of the College of Home Economics; Arthur Hutchins Cilley, Assistant Professor of Surgery, Department of Orthopedic Surgery. Dr. Van Slyke was for many years a distinguished member of the Experiment Station Staff in Geneva, and Dr. Cilley of the staff of the Medical College in New York. These men were not generally known to their colleagues in Ithaca, but Professor Davenport, Professor Moler, and Professor Van Rensselaer did their notable work here and made for themselves secure places in the esteem and affection as well of their neighbors as of their professional associates in the larger world.

An unusual number of the Faculty have completed their terms of active service within the academic year. Professor Charles Henry Hull, Goldwin Smith Professor of American History, retired from active service on September 29, 1931; Professor Louis Munroe Dennis, Professor of Inorganic Chemistry and Director of the Department of Chemistry, Professor Clarence Augustine Martin, Professor of Architecture and sometime Dean of the College of Architecture, and Professor Nathaniel Schmidt, Professor of the Semitic Languages and Literatures and Oriental History, retired at Commencement, 1932; Professor Adam Capen Gill, Professor of Mineralogy and Petrography, will retire on August 22, 1932. Happily, by action of the Board of Trustees on June 15, 1931, emeritus professors now retain membership in the University Faculty, and from those residing in Ithaca the University may rightly and gratefully expect continuing participation in its counsels.

Also on June 15, 1931, the Board of Trustees created the office of Provost carrying membership in all faculties of the University, and appointed Dr. Albert Russell Mann to that office. By Trustee action on November 14, 1931, the emeritus librarians were specifically included in faculty membership and the Provost was designated as *ex officio* the presiding officer of the Faculty in the absence of the President. At a special meeting of the Faculty held on June 16, 1932, the President nominated Dr. Cornelius Betten to be Dean of the University Faculty, and the nomination was approved by the Faculty without dissent; at a meeting of the Board of Trustees on June 20 Dean Betten's appointment was confirmed.

The University Faculty consists of members of the instructing staff with rank of professor or assistant professor, besides a few executive officers of the University who have been specifically included by action of the Board of Trustees. At the end of the year, the Faculty resident in Ithaca numbered 406, of whom seventeen were in the emeritus relation. Twelve emeritus professors resided out of town, including seven formerly of the Medical School Faculty. Eight members of the Ithaca faculty were on leave of absence throughout the year and eighteen others for one term or less.

The Faculty held nine regular sessions and one special session.

PRESIDENT'S REPORT

FACULTY REPRESENTATIVES IN THE BOARD OF TRUSTEES

On December 9, 1931, the Faculty elected George Young, jr., Professor of Architecture and Dean of the College of Architecture, to succeed Professor Herman Diederichs as Faculty Representative in the Board of Trustees, his term of three years to begin on January 1, 1932. The other representatives now on the Board are Professor Ernest G. Merritt and Dr. Liberty Hyde Bailey.

THE LIBRARY AND HECKSCHER COUNCILS

On October 14 Professor George L. Hamilton was re-elected to the Library Council as representative of the Group of Letters for a two-year term running from November 1, 1931, to November 1, 1933, and Professor Albert H. Wright was re-elected by the Group of Science to serve similarly. At this same meeting the Group of Science elected Professor Roswell C. Gibbs to the Heckscher Research Council for a four-year term beginning November 1, 1931, in succession to Professor William M. Sawdon.

WAR ALUMNI

At Commencement, 1932, on recommendation of the University Faculty, the Board of Trustees conferred the distinction of War Alumnus upon Theis Roberts ex-'18 of the College of Agriculture and on Leon Wendell Stewart ex-'17 of the College of Arts and Sciences, ex-'18 of the College of Engineering.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS

The Chairman of the Committee on Undergraduate Scholarships, Professor Walter B. Carver, submits the following statement of the work of his Committee: There were 128 contestants who took the three competitive examinations in September, 1931, on the basis of which most of our undergraduate scholarships are awarded. The option with regard to language was exercised as follows: Spanish was chosen by 7, German by 16, Latin by 27, and French by 78. The steadily increasing percentage of those electing French is worthy of notice. On the basis of these examinations, the committee awarded eight George W. Lefevre scholarships, two Eudorus C. Kenney Scholarships, and eighteen University Undergraduate scholarships.

In addition to the above, the committee has also awarded during the year one of the Dr. Louis Alexander Dreyfus scholarships and the Dwight Memorial scholarship to members of the junior and senior classes.

The scholastic records of the scholarship holders have been mostly very satisfactory, the committee having had occasion to vacate only one scholarship during the year because of unsatisfactory work.

COMMITTEE ON UNIVERSITY POLICY

A special committee was authorized on October 14, 1932, "to inquire into the existing statement of the statutes and other legislation of the University with the idea of bringing them into closer coordination with its educational aims." In a preliminary report presented on April 20, 1932, this committee proposed a change in the composition of the Committee on University Policy, membership in which has been *ex officio* since it was first constituted in 1905, the members being executive officers of the University and the several colleges. The recommended change was adopted: after January 1, 1933 the Committee on University Policy will consist of the Dean of the University Faculty, the Representatives of the Faculty in the Board of Trustees, and five members of the University Faculty who will be elected, for five-year terms, at the same time and in the same manner as Faculty Representatives are elected. The Dean of the University Faculty was designated as chairman of the Committee on University Policy, and the functions of the Committee were broadly defined as "to recommend to this Faculty such legislation as the Committee may deem desirable and to report to this Faculty upon such matters as may from time to time be referred to the Committee by this Faculty."

RESIDENCE REQUIREMENTS

A resolution of the Faculty, adopted on December 9, 1925, declared "That it is the sense of the University Faculty that there should be a uniform rule requiring that the last year of residence before receiving a degree from Cornell University should be taken in this University." Though the resolution expressed a wish rather than a command, the colleges have generally if not invariably interpreted it to mean that any exception to the rule of requiring residence during the last two terms must be approved by special vote of the University Faculty. Some dissatisfaction having arisen over the uncertain phrasing of the requirement and the cumbersome way of enforcing it, the Faculty on June 8, 1932 adopted a pertinent recommendation of the Committee on University Policy in the following form: "A candidate for a degree of Cornell University shall be required to spend the last year of his candidacy in residence at this University, except that, with the consent of the special faculty concerned, a candidate may carry on the work of that year or a part of that year *in absentia*, provided that his work be done under the supervision of a faculty of this University, that before he receive the degree he pass such an examination or make such a report as the faculty supervising his work may require of him, and that during the period of his absence he be registered as a student of this University and pay a fee of such an amount as the Board of Trustees may fix."

The Faculty has again undertaken to devise a uniform system of grading which will please all the colleges and be adopted by them. A committee on the subject was appointed in January to hear suggestions from the several colleges and to recommend legislation.

In response to an invitation from the Board of Trustees, the Faculty has considered further the form which Military Training should take if the compulsory feature is done away, and has approved statements from the several faculties of the principles that would guide them in the administration of an elective course.

With the welcome appointment of a new Dean, who will hold membership in practically all the standing committees, the Faculty at large can no doubt be kept better apprized than recently of the business transacted by these committees. It is to be hoped also that provision can soon be made for housing the records of the Faculty, considerable in quantity and not inconsiderable in value, as apparently they have never yet been housed, conveniently and securely.

R. P. SIBLEY,

Secretary of the University Faculty.

APPENDIX II

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University:

SIR: I have the honor to present the report of the Graduate School for the year 1931-32:

ENROLLMENT

The enrollment in the Graduate School has doubled since 1924 and still continues to increase, although the increase of 1931-32 over 1930-31, approximately nine per cent., is less than for several years previous. In the five years since 1926-27 the enrollment has increased 68 per cent. The distribution of this increase among the several fields of study is reasonably uniform, as is shown by the following table:

<i>Field of major subject</i>	<i>Students 1926-27</i>	<i>Registered 1931-32</i>	<i>Increase in percentage</i>
Group A, Languages and Literatures.	98	163	66
Group B, History, Philosophy, Political Science	155*	199*	28*
Group C, Physical Sciences.	140	245	75
Group D, Biological Sciences.	166	256	55
Group E, Engineering, Architecture.	54	99	83
Group F, Sciences, Medical College (in New York).	3	8	
Group G, Agricultural Sciences.	61	90	47
Group H, Law	—	1	
Group I, Education.	—	78*	
Totals.	677	1139	

*Group I, Education, was organized in 1929-30. Previous thereto, Education was included in Group B. If the enrollment in Education is included in Group B for 1931-32 the increase over 1926-27 is 78 per cent.

Because of the great interest in, and the numerous applications of science, the increase in enrollment in the natural sciences was to be expected.

It is, however, peculiarly significant that increases in the humanities have almost equalled those in the sciences. In the present condition of world turmoil, one cannot emphasize too strongly the importance of encouraging, so far as may be possible, study and research directed toward a better understanding of the complex phenomena of modern society. That Cornell is continuing to make notable contributions to this important work, is a source of pride and gratification. But the very magnitude and importance of the problems to which workers in all branches of the humanities are directing their attention make it all but imperative that in plans for the development of Cornell University, special attention should be given to strengthening the several departments in the fields of Languages, Literature, and the Social Sciences. There is urgent need for additional professorships, fellowships for graduate study, and funds in support of research.

The number of candidates for the several professional master's degrees has remained nearly constant during the past decade. As a result, however, of the considerable increase of enrollment in other fields the proportionate enrollment of these candidates has decreased from some fifteen per cent. in 1921 to about seven per cent. in 1931. This relative decrease does not necessarily indicate a lessening of the demand for opportunities for advanced study and research in the professions. Rather, the increase in the so-called non-professional graduate work reflects the growing appreciation of the importance of breadth of training in professional, as well as non-professional, fields.

At the present time the proportion of our graduate students who are candidates for the doctorate is increasing. In 1924 candidates for the doctorate comprised forty-five per cent. of the graduate student body. In 1931-32 that proportion had risen to fifty-seven per cent. Candidates for the non-professional master's degrees—A.M. and M.S.—comprised approximately 30 per cent. of the total in 1931-32.

ADMISSION

The rapid increase in enrollment in the Graduate School in recent years has made it obvious that ultimately at least some system of limiting admissions must be devised. Since it did not seem wise at present to set any arbitrary upper limit to the number of students in the Graduate School, the Faculty has given to the General Committee authority to appoint a standing committee on admissions, which, in collaboration with the members of the Faculty most concerned in each case, will scrutinize applications for admission to the end that all students admitted shall, so far as may be judged in advance, measure up to the standards which we wish to maintain in our graduate work. It is a very important feature of this plan that each application for work in a given field is referred to one or more professors in that field for advice with regard both to the candidate's fitness for undertaking the contemplated graduate work and to the availability of

facilities for study and research in that field. This insures that, in general, only capable students will be selected and that no department need accept more students than it can reasonably accommodate.

Of course no system of admissions can work perfectly. In spite of the added scrutiny which is now being given to applications it is probable that a few students unsuited to graduate work will be admitted; and it is also probable that now and then a potentially able student may be denied admission. The alternative would be to admit all applicants, and to make selections after a year or so of contact. It may be that ultimately such a system of probation may be adopted. But at the present time it seems wiser to take advantage of the economies offered by the plan of admissions now in operation. The standing committee on admissions has been organized and has already begun its work.

It is a great pleasure to acknowledge the spirit of helpfulness and of cooperation evidenced by all members of the Faculty in assisting in the selection of candidates for admission to the Graduate School.

FOREIGN LANGUAGE REQUIREMENTS

Since 1910 Cornell University has required a reading knowledge of French and German as prerequisite to candidacy for the doctorate. Each student has been required to "satisfy his special committee before the beginning of his third term of residence that he possesses a reading knowledge of French and German adequate for use in his major field." Due in large part to differences in standards and in practices which have inevitably grown up during the past twenty years, the Faculty has authorized the appointment of a Language Examination Board, to be made up of representatives from the several fields of graduate study. Hereafter each student will satisfy one or more members of the Language Examination Board that he has met the foreign language requirements for the doctorate. These requirements must be met before the beginning of the fourth term of residence.

NEEDS OF THE GRADUATE SCHOOL

Fellowships and Scholarships. The generous action of the Board of Trustees in making available 20 tuition-free scholarships in the Graduate School beginning with 1932-33 is a very important step in augmenting the assistance which Cornell has for many years given to the ablest of our graduate students to enable them to carry on their work. It is to be hoped that when financial conditions of the University return to normalcy, the number of such tuition-free scholarships can be at least doubled, so that all fields of graduate study may share in the awards.

It has been repeatedly pointed out in the annual reports of my distinguished predecessors in office that the stipends carried by our fellowships and scholarships compare very unfavorably with those given in many of the other large universities of the country. To state the comparison briefly: The stipends should be doubled in order that Cornell may compete on even terms for the more promising graduate students. It is quite obvious, however, that, even under normal conditions, the resources of the University are so urgently needed for other purposes that additional subsidies for graduate work must in general await the availability of special funds. It is urged that the attention of prospective donors be called to this opportunity. Not only should the stipends of existing fellowships and scholarships be increased, but additional fellowships should be provided in fields which have grown up since the allotment of the present fellowships and scholarships was made, and which now are without subsidies of any kind.

Funds for Research. The purpose of graduate work is to train the student in creative scholarship. It is axiomatic that graduate instruction is effective just in proportion as each member of the faculty giving it has himself opportunities to carry on research in his own field. It is desirable that teachers of undergraduates should be productive scholars. For teachers of graduate students, this is imperative.

It is to be doubted whether any equal sum of money ever given to any university has been more effective in promoting scholarly research among both faculty and graduate students than has the Heckscher Research Foundation at Cornell. Although primarily given to aid members of the faculty in carrying on

their investigations, the reaction on graduate instruction and research has been most marked. For, one very important by-product of research by a faculty member is a group of problems for his graduate students. A problem so originating is the more interesting, inspiring, and instructive to the student if he realizes that his work is part of a larger field of research actively carried on by and under the direction of the professor.

But experience has shown that the Heckscher Research Fund can cover effectively only a few of the many fields of graduate work cultivated at Cornell. We need an endowment several times as large. We need greatly increased library facilities for workers in the humanities. We need funds to provide facilities to supplement the learned journals in the publication of the results of research. In the laboratory sciences it frequently happens that a particularly promising research problem must be abandoned for want of some piece of apparatus at a critical stage in the investigation. And always, the competent investigator can effectively utilize the services of assistants, and thereby speed up his work. The assistants themselves, usually graduate students, profit from their contact with and work under the professor quite as much as from graduate instruction itself.

In short, the most effective way to improve conditions for graduate study is to provide increased facilities for research by the Faculty. It is urged that special attention be given to securing funds for this purpose.

F. K. RICHTMYER,
Dean of the Graduate School.

STATISTICS OF ATTENDANCE OF GRADUATE STUDENTS

	1931-32	1930-31	1929-30	1928-29	1927-28
Number of students registered during the academic year...	1139	1020	863	767	767
Number of students registered during the summer, as below	860	685	612	518	475
Summer Sessions...	619	476	428	331	315
Personal Direction.	241	209	184	187	160

COMPARATIVE ENROLLMENT OF GRADUATE STUDENTS FOR FIVE-YEAR PERIODS

1902-3	1906-7	1911-12	1916-17	1921-22	1926-27	1931-32
201	239	359	467	534	677	1139

CLASSIFICATION OF GRADUATE STUDENTS

Graduate Students Receiving Degrees, Classified According to the Degree Received:

	1931-32	1930-31	1929-30	1928-29	1927-28
Doctors of Philosophy....	133	90	129	102	95
Master's Degrees, as below...	249	200	174	175	185
Masters of Arts.	111	92	97	91	83
Masters of Arts in Education	5	3	0	0	0
Masters of Science....	84	66	50	51	69
Masters of Science in Agriculture	3	7	4	4	8
Masters of Science in Education	5	5	0	0	0
Masters in Forestry	2	3	5	6	2
Masters of Architecture...	4	3	0	1	2
Masters of Landscape Architecture....	0	0	0	0	0
Masters of Chemistry. . .	2	5	1	3	0
Masters of Civil Engineering	15	11	9	7	12

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Masters of Mechanical Engineering.....	7	1	4	9	7
Masters of Electrical Engineering.....	11	3	3	2	2
Masters of Fine Arts.	0	1	1	1	0
Totals.	382	290	303	277	280

Graduate Students Classified According to the Degree
for which They Are Candidates:

	Academic Year 1931-32	Summer 1931
Doctors of Philosophy.....	652	274
Master's Degrees, as below....	429	586
Masters of Arts.....	168	258
Masters of Science.	152	150
Masters of Science in Agriculture.....	18	5
Masters of Forestry.....	4	1
Masters of Arts in Education..	6	40
Masters of Science in Education..	10	35
Masters of Architecture.....	6	0
Master of Landscape Architecture.	1	0
Masters of Chemistry.....	5	3
Masters of Civil Engineering.....	21	8
Masters of Mechanical Engineering...	17	5
Masters of Electrical Engineering.	19	3
Masters of Fine Arts.....	1	0
Masters of Laws.	1	0
Non-candidates:		
Resident Doctors... ..	18	21
Others..	40	57
Total... ..	1139	860

Graduate Students Classified According to the Group in
which the Major Subject Falls:

	1931-32	1930-31	1929-30	1928-29	1927-28
Group A, Languages and Literatures.....	163	137	118	125	108
Group B, History, Philosophy, and Political Science..	199	165	148	187	212
Group C, Physical Sciences...	245	211	217	169	161
Group D, Biological Sciences.	257	200	180	155	157
Group E, Engineering, Architecture.	99	71	61	63	54
Group F, Science Departments, New York City	8	3	4	4	1
Group G, Agricultural Sciences	90	81	70	63	63
Group H, Law... ..	1	2	2	1	
Group I, Education.	78	66	63		

INSTITUTIONS FROM WHICH STUDENTS ENTERED THE
GRADUATE SCHOOL

Aberdeen University	1	Agricultural College of Poona,	
Acadia University.....	2	India.....	1
Adelphi College.....	1	Akron University	3
Adrian College.	1	Alaska Agricultural College.	1

Albright College...	2	Greenville Woman's College...	2
Alfred University...	4	Hamilton College...	7
Allegheny College...	4	Hampden Sidney College...	1
American University of Beirut...	1	Hampton Institute...	1
Amherst College...	5	Harvard University...	3
Atlantic Christian College...	1	Haverford College...	1
Atlantic University...	1	Hillsdale College...	3
Barnard College...	4	Hobart College...	7
Bates College...	3	Holy Cross College...	1
Baylor University...	1	Hongkong University...	1
Berea College...	2	Hood College...	1
Berlin College of Agriculture...	1	Hope College...	2
Bethany College...	1	Houghton College...	2
Bombay University...	1	Howard University...	1
Boston University...	1	Hunan Polytechnic Institute...	1
Bowdoin College...	2	Hunter College...	7
Brooklyn Polytechnic Institute...	1	Huron College...	1
Brussels University...	1	Illinois College...	1
Bucknell University...	4	Illinois Wesleyan University...	1
Butler University...	3	Indiana University...	1
California Institute of Technology...	2	International College of Smyrna...	1
Calvin College...	1	Iowa State College...	9
Cambridge University...	2	Ithaca College...	1
Canisius College...	1	J. C. Smith University...	1
Carthage College...	1	Johns Hopkins...	3
Case School of Applied Science...	1	Junior Central College, India...	1
Chalmers University...	2	Kansas State Agricultural College...	5
Chekiang School of Technology...	1	Knox College...	1
Chiao Tung University...	1	Lake Erie College...	1
Citadel...	2	Laval University...	4
Clark University...	2	Lebanon Valley College...	2
Clarkson School of Technology...	1	Leeds College...	1
Clemson College...	5	Lehigh University...	2
Colgate University...	5	Leland Stanford University...	6
College of the City of New York...	6	Lewis Institute...	2
Colorado Agricultural College...	4	Livingstone College...	1
Colorado College...	5	Louisiana State University...	3
Columbia University...	13	McGill University...	11
Connecticut Agricultural College...	6	Manitoba University...	1
Cooper Union Institute...	3	Mansfield College...	1
Cornell College...	2	Marietta College...	1
Cornell University...	330	Maryville College...	1
Costa Rica University...	1	Marywood College...	1
Dartmouth College...	4	Massachusetts Agricultural College...	11
Davidson College...	3	Meredith College...	2
Denison University...	1	Miami University...	2
De Pauw University...	8	Michigan State College...	8
Detroit City College...	1	Middlebury College...	2
Dickinson College...	3	Midland College...	1
Duke University...	1	Mississippi A. and M. College...	3
Elmira College...	6	Missouri Teachers College...	1
Fisk University...	1	Montana State College...	1
Fuh Tan University...	3	Montreal University...	1
Fukien Christian College...	1	Mount Allison University...	1
Furman University...	2	Mount Holyoke College...	6
Galloway College...	1	Nanking Conservancy Engineering College...	1
Geisenheim University...	1	Nanking National Central University...	3
George Peabody College...	3	Nebraska Wesleyan University...	1
George Washington University...	3		
Goucher College...	3		

New Jersey College for Women...	1	Southwest Missouri State Teachers College...	1
New Mexico A. and M. College....	2	Stellenbosch University.	2
New York State College for Teachers	4	Susquehanna University	1
New York University	5	Syracuse University	12
Niagara University	2	Tangshan Engineering College....	1
North Carolina A. and T. College..	1	Tarkio College.....	3
North Carolina State College.....	3	Temple University...	1
North Dakota State College.....	4	Texas A. and M. College.....	6
Northwest Missouri State Teachers College.....	1	Texas Christian University	1
Northwestern University.....	4	Tokio University...	1
Oberlin College.....	23	Tsing Hua University..	2
Occidental College.....	1	Tufts College.....	1
Ohio Northern University	3	Tulane University	1
Ohio State University...	11	Tusculum College.....	1
Ohio Wesleyan University	4	Union College.....	4
Oklahoma A. and M. College.....	1	University of Alabama	1
Oklahoma Baptist University.....	1	University of Arkansas.....	7
Oklahoma City University...	2	University of British Columbia....	4
Olivet College.....	1	University of Buenos Aires.....	1
Ontario Agricultural College.....	2	University of Buffalo.....	1
Oregon State Agricultural College.	1	University of California.....	8
Oxford University.....	1	University of California at Los Angeles.....	3
Pacific University.....	1	University of Chicago.....	9
Peking National University..	2	University of Cincinnati....	2
Pennsylvania State College.	21	University of Colorado.....	2
Peru State Teachers College.	1	University of Copenhagen.....	2
Pomona College..	1	University of Dayton.....	2
Prague University	1	University of Denver.....	1
Pretoria University..	1	University of Detroit.....	2
Princeton University...	3	University of Florida.....	3
Purdue University..	11	University of Georgia.....	4
Radcliffe College.....	1	University of Illinois...	22
Randolph Macon College.....	1	University of Iowa.....	2
Reed College.....	1	University of Kansas.....	10
Rensselaer Polytechnic Institute..	3	University of Kentucky.....	3
Rice Institute.....	1	University of Leipzig.....	3
Richmond College.....	1	University of Liège.....	1
Robert College.....	1	University of Liverpool.....	1
Rollins College.....	1	University of Maine.....	5
Royal Hungarian Agricultural College.....	1	University of Maryland.....	3
Royal Technical College (Copenhagen).....	1	University of Michigan.....	7
Royal Veterinary College.....	1	University of Milan.....	1
Rutgers.....	3	University of Minnesota.....	6
St. Andrew's University.....	1	University of Mississippi.....	1
St. Bernard's Seminary.....	1	University of Missouri.....	6
St. Elizabeth's College.....	1	University of Montana.....	3
St. Lawrence University...	1	University of Munich.....	1
Sao Paulo University.....	1	University of Nanking.....	11
Senshin University, Japan.	1	University of Nanyang	2
Shanghai College.....	1	University of Nashville.....	1
Shortliff College..	1	University of Nebraska.....	6
Simmons College.....	3	University of New Hampshire....	3
Skidmore College.....	1	University of New Orleans.....	1
Smith College.....	3	University of North Carolina.....	4
Soochow University.....	6	University of Notre Dame..	2
Southeastern University, China....	2	University of Paris.....	1
		University of Pennsylvania.....	4
		University of the Philippines.....	4

University of Pittsburgh...	2	Vassar College.....	2
University of Porto Rico.....	2	Virginia Polytechnic College.....	4
University of Posnan.....	1	Wabash College.....	4
University of Queensland.....	1	Wake Forest College.....	2
University of Redlands.....	1	Warsaw Polytechnic Institute..	1
University of Richmond.....	1	Waseda College.....	1
University of Rochester.....	12	Washburn College.....	2
University of Saskatchewan...	2	Washington and Jefferson College.	2
University of Sofia.....	1	Washington and Lee College.....	2
University of South Africa.....	2	Washington State College.....	2
University of South Dakota....	1	Wellesley College.....	6
University of Tennessee.....	1	Wells College.....	2
University of Texas.....	1	Wesleyan University.....	6
University of Toronto.....	6	West Texas State Teachers College	2
University of Utah.....	4	Western Reserve University....	4
University of Vermont.....	1	Wheaton College.....	1
University of Virginia.....	1	Whitman College.....	2
University of Warsaw.....	1	Wilberforce College.....	1
University of Washington.....	2	William Smith College.....	2
University of West Virginia....	8	Wilmington College.....	1
University of Western Ontario..	3	Wilson College.....	2
University of Wisconsin.....	5	Wofford College.....	1
University of Wyoming.....	2	Wooster College.....	2
Ursinus College.....	1	Yale University.....	3
Utah State Agricultural College.	8	Yenching University.....	2
Vanderbilt University.....	1	Zagreb University.....	2

GEOGRAPHICAL DISTRIBUTION OF GRADUATE STUDENTS

Alabama.....	1	Ohio.....	34
Arizona.....	3	Oklahoma.....	3
Arkansas.....	6	Oregon.....	2
California.....	10	Pennsylvania.....	62
Colorado.....	8	Rhode Island.....	2
Connecticut.....	11	South Carolina.....	12
District of Columbia.....	6	Tennessee.....	6
Florida.....	4	Texas.....	12
Georgia.....	5	Utah.....	11
Illinois.....	29	Vermont.....	3
Indiana.....	22	Virginia.....	12
Iowa.....	9	Washington.....	3
Kansas.....	5	West Virginia.....	12
Kentucky.....	8	Wisconsin.....	3
Louisiana.....	4	Wyoming.....	2
Maine.....	11		
Maryland.....	8	Alaska.....	1
Massachusetts.....	27	Albania.....	1
Michigan.....	12	Argentina.....	1
Minnesota.....	3	Armenia.....	1
Mississippi.....	4	Australia.....	2
Missouri.....	16	Belgium.....	1
Montana.....	3	Brazil.....	2
Nebraska.....	10	British West Indies.....	1
New Hampshire.....	5	Bulgaria.....	1
New Jersey.....	30	Canada.....	34
New Mexico.....	1	China.....	55
New York.....	507	Costa Rica.....	3
North Carolina.....	21	Czechoslovakia.....	1
North Dakota.....	2	Denmark.....	2

Egypt...	1	Panama.	1
England...	5	Persia...	2
Germany.	4	Philippine Islands.	4
Hungary.	1	Poland..	4
India.....	6	Porto Rico....	3
Iraq.....	1	Russia.....	4
Italy....	1	Scotland.....	2
Japan....	6	Siam.....	1
Java....	1	South Africa...	6
Korea....	1	Syria.....	2
Latvia....	1	Turkey..	1
Mexico...	1	Venezuela..	1
Palestine..	1	Yugoslavia.. . . .	1

APPENDIX III

REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

To the President of the University:

SIR: I have the honor to submit the following report of the College of Arts and Sciences for the academic year, 1931-32.

THE NEW CURRICULUM

The most important action of the year was the adoption by the faculty of a new curriculum for the College. In my report of last year I mentioned the appointment, on April 7, 1931, of a special committee consisting of Professors Bishop, Caplan, Cunningham, Freeman, Hebel, Homan, Hurwitz, Laubengayer, Marcham, Murdock, Wichelns, and Petry, Chairman, which had the consideration of this matter in hand. The committee carried on its deliberations during the early part of the year, adding Professor Sabine in place of Professor Wichelns who was on sabbatic leave. The committee presented its report to the faculty on February 2, 1932. Special meetings followed on the evenings of February 15 and 18 at which the report was discussed by the faculty in committee of the whole. On March 1 the report, which had in the meantime been revised in certain ways by the special committee, was adopted by the faculty.

When first presented the recommendations of the special committee included three important requirements:

1. An enlarged and more comprehensive plan of study in the student's major field of interest.
2. Six hours to be taken in each of four prescribed groups of subjects: English, Foreign Languages, History, and Science.
3. At least twelve hours to be taken in a minor subject, unrelated to the major field.

The faculty defeated the third of these requirements, modified the second by adding a fifth group, and adopted the first as originally proposed.

The new major requirement, as it now goes into effect, is a modification and expansion of the present major-group requirement of the College. Hitherto this requirement could be satisfied by the election of twenty hours of advanced work in a department or combination of departments constituting an "upperclass group." Before beginning this group, a student must have completed sixty hours of work, including certain underclass requirements. The newly adopted plan abolishes the distinction of underclass and upperclass requirements. Hereafter the major work of the student may be started in the sophomore year. It will follow a program outlined by the department, and will include at least fifteen hours of related course-work in other departments. In outlining its program of

major work a department may not require more than twenty-four hours of credit in its own subjects, but must plan a total program of not less than thirty-six or more than forty-eight hours *in toto*. These restrictions, though a part of the faculty's legislation, were intended for the guidance of departments, and are not published in the Announcement of the College which merely informs the student that "selection of courses to be offered in satisfaction of these requirements is subject to the restriction that twenty-four hours of the total must be chosen from courses not marked by asterisks," that is to say, which the departments regard as being of an advanced grade.

The significance of this departure from our previous practice lies in the greatly increased responsibility now assumed by the departments in integrating their courses with those related to them in other departments, together with an undertaking to provide the student with a more flexible and comprehensive program of study from the sophomore year onwards to the completion of his college course. Not only are large departments required to plan and supervise the election by their major students of courses in related subjects outside their own departments, it also becomes possible for a small department in charge of a single professor to offer major work, whereas the previous requirement of twenty hours in a major subject could sometimes not be satisfied in one department alone.

Two supplemental acts of legislation are calculated to assist both students and departments in working out a flexible and integrated program of major-study. The first of these modifies our present provision for informal study. Hitherto there have been two plans of informal study: supervised and unsupervised. The unsupervised plan, in accordance with which the first fifty students in each of the upper three college years were permitted to register for four instead of five formal courses and yet receive three hours of credit for the course omitted, has now been abolished. The supervised plan of informal study is continued without restricting the privilege to those of high scholastic standing. Henceforth informal study becomes a regular part of the major program of study and may be permitted or prescribed by any department as a part of its major work. Credit of this kind, however, is restricted to students who have already earned at least sixty hours, and this credit may not exceed a total of six hours in the junior or twelve hours in the senior year.

The second of these supplemental actions provides that "any department representing a major subject may include the passing of a comprehensive examination as a part of its major requirements."

These two provisions are permissive rather than mandatory, partly because it was thought wise to experiment with informal and tutorial instruction, which will prepare for a comprehensive examination as the culmination of the student's college course, before enacting any general regulation which would govern the program of major work in every department. It was also deemed unwise to enact a regulation of this kind at a time when the added expense of its administration might well be prohibitive in certain departments where the number of major students is large. It is, however, expected that the privilege of informal study, with and without the requirement of a formal comprehensive examination, will be freely offered wherever the facilities of the department concerned make it possible to do so, and that we shall thereby gain an experience which may eventuate in a program of study for our students which will no longer of necessity be recorded as the satisfactory completion of 120 hours of course-work.

The second main requirement imposed upon our students by the new curriculum is the completion of four prescribed subjects of six hours each in English, a foreign language, history, a laboratory science and, prior to graduation, six hours in one of the following subjects: philosophy, psychology, economics, government, or mathematics. The addition of this fifth group is in lieu of the minor requirement which was originally proposed by the committee.

Taken as a whole, the new curriculum seems to provide a flexible plan of study emphasizing the department's responsibility both in guiding its students and in providing a suitable program of courses. It will encourage a much closer cooperation among departments than hitherto has been the case. Its adoption also indicates the agreement of the faculty upon a philosophy of collegiate education which involves an integrated and progressive course of study in related subjects

based upon literacy, as suggested by the English and foreign language prescriptions, history, and an acquaintance with at least one laboratory science.

While the old distinction of under- and upperclassmen has been abolished, the freshman year is set off as one given over to introductory and basic training, during which time the prescribed subjects of English and foreign languages will be studied. Although the rest of the freshman's work is elective, it may be expected that the other two prescribed subjects, history and science, will usually be taken in the student's first year. A fifth subject may include any of a considerable list of courses open to freshmen. While, with the exception of Music I, all these courses belong to one or other of the prescribed groups, opportunity is given for the election of first-year subjects in other colleges, among which are to be found certain courses in the Fine Arts which are offered by the College of Architecture especially for Arts students. In other words, a way is left open for a student to elect, from his freshman year onwards, technical courses like those of drawing or painting, as well as certain courses in Agriculture, Engineering, and Home Economics, for which the student may have a special interest and aptitude.

In order that the basic work of the freshman year may be conducted with a full appreciation of the student's individual interests, needs, and aims, a special committee consisting of Professors Liddell, Murdock, Sibley, Woodward, and Freeman, chairman, was appointed to consider the advisory system as it relates to the new curriculum. This committee has recommended, and the faculty has approved, a distinct group of freshman advisers. This group will be organized by the Chairman of the Advisory Board for Underclassmen, and will confer from time to time upon the problems which present themselves in planning and supervising the beginning of the student's career in college. To each of these advisers, some fifty in number, approximately ten freshmen will be assigned. The student will continue under the same adviser until he selects his major field of study. This he may do after completing the freshman year, and must do before entering upon his third year of residence. The student will then select as major adviser for the remainder of his course a professor or assistant professor in the department of his major subject.

The special committee has also recommended a committee of each department which will concern itself primarily with matters relating to the major requirements and the advising of major students. Such a committee, consisting of Professors H. S. Liddell, H. D. Reed, and A. T. Kerr, chairman, has been appointed "to formulate a statement of the major requirements in Animal Biology for premedical students; to prepare a list of major advisers for premedical students, to assist premedical students in the selection of advisers from this list; and to furnish the advisers such technical information as may be necessary." Similar committees indicated for other pre-vocational interests, such as law and education, will be formed whenever a need for them is felt.

THE PLACEMENT OF OUR GRADUATES IN TEACHING AND BUSINESS POSITIONS

Movements have been made during the year to improve our facilities for the placement of our graduates in teaching and in business positions. Professor R. H. Jordan, for many years in charge of the Teacher Placement Bureau, has relinquished this responsibility and, in his place, Mr. M. L. Hulse, Instructor in Education, has taken charge of what is now called the Bureau of Educational Service. I wish to express appreciation of the loyal and untiring service rendered by Professor Jordan not only to the College but to the University as a whole. His successor, Mr. Hulse, is well qualified to continue and develop this service to which he will be able to devote a large part of his time.

A step has also been taken in the organization of a placement bureau for business positions by the appointment of a special committee consisting of Professors English, Freeman, and Durham, chairman. This committee takes over the registered list of our graduating students who seek employment and is assisting them in making contacts with business houses. In these difficult times, more than ever before, it is incumbent upon us to aid our graduates in every legitimate way in securing such positions in society as the training which the College has afforded them may seem to warrant.

MILITARY TRAINING IN THE COLLEGE

In connection with the action of the University faculty in requesting of the Trustees that the now compulsory course in military training should become elective, the faculty of the College of Arts and Sciences was asked to propose a plan for accomplishing this end. After consideration the faculty has approved a proposal that the course in basic drill be accorded one hour credit, each term, for the four terms of its duration, and that these four hours be added to the requirement for graduation. If the Trustees approve the proposal, a similar credit will be accorded work in Physical Education which is now required of all women students. The additional requirements of four credit hours may also be satisfied by the election of other studies now offered by the College.

It seems reasonable to suppose that, while fewer students of the College will elect military training than now take it under compulsion, the acceptance of the subject as a regular credit-course in the College will prove beneficial to the department by allowing it to exact more of those who elect this subject and thus prepare them more adequately for the advanced work of the R.O.T.C.

A PROPOSAL TO ABANDON MID-YEAR EXAMINATIONS

A proposal emanating from the Committee on University Policy to omit the mid-year examination period was defeated in the faculty of this College. There are, however, some interesting possibilities in this proposal which were perhaps not fully understood by the faculty at the time action was taken. In view of the fact that the two important recesses of the academic year occur in December and April, the break of the examination period at midyears, followed by the so-called "Junior Week," is a disrupting influence. The abolition of midyear examinations would restore two weeks to the regular academic calendar. It would also encourage the formation of year-courses and would permit their organization in sub-units of work terminating with the recess periods. It is true that in providing a large number of year-courses, we should have to assume that students generally would be allowed to continue in residence throughout the year. This assumption, however, would not prevent the review of a student's work before the December and Spring recesses when such action by the faculty could be taken in cases of academic delinquency as might be found desirable at those times.

The formation of more year-courses would have the effect of consolidating our offerings, and thus relieve the College of a number of one-term courses which are so highly specialized that their validity as undergraduate offerings is sometimes doubtful. It would, on the other hand, be possible to articulate subjects given by different members of the same department, and even by members of different departments, into year-courses upon which a comprehensive examination could be given at the end of the year.

The normal teaching load of a professor under these new conditions might include a general introductory year-course in his subject followed by an intermediate course, divided as might be thought fit into units which terminate at any time, though most naturally at the two recess periods. The professor's further responsibility for his advanced students, both undergraduate and graduate, would then be organized on the informal basis which now characterizes graduate work, that is, as seminars and round-table courses.

All examinations, other than those provided in the regular examination period at the end of the year, would be in the nature of preliminary examinations; but the right to remove a student for unsatisfactory work from any given course at any time might still be exercised by the faculty upon recommendation of the department concerned.

The proposal would presumably lead to the abandonment of an hours-requirement for graduation. In its place would appear a course-requirement—say twenty year-courses, of which the new curriculum prescribes five and requires not fewer than six in the major group. We should also abandon the admission and graduation of students in February, and would require the approval of a year's program of study in September.

While certain difficulties would be met in putting this scheme into operation, particularly so if the other undergraduate colleges of the University did not also adopt the plan, I see in it a real possibility of getting away from the present disorganized cafeteria style of college education, in which students pick courses on an hour-credit basis and the faculty is inclined to give greater heed to the offering of salads and desserts than it does to the main courses of a substantial meal. Nor can it be doubted, I think, that the reorganization of courses which this proposal indicates, would eventuate in a far more economical and substantial program of studies than the College now offers.

THE EFFECTS OF THE ECONOMIC DEPRESSION ON THE COLLEGE

The great economic depression which now engulfs us all, has been felt in all the departments of the College and is strongly reflected in their annual reports. We have filled none of the vacancies which now occur by reason of the retirements of Professors Dennis, Gill, and Schmidt. The Department of Chemistry will be administered temporarily by a Committee consisting of Professors Johnson, Rhodes, and Papish, Chairman. Professor Gill's work in Geology will be temporarily cared for by other members of the department, and Professor Schmidt's important work in Semitics and Oriental History unfortunately must lapse for the time being. In the Sage School of Philosophy, Assistant Professor Church will be on leave without a substitute to fill his place. We shall welcome, however, the addition to the School of Professor Burt from the University of Chicago who was appointed a year ago as Professor of Philosophy in charge of the philosophy of Religion. In the Department of Physics the resignation of Assistant Professor Barton, who has become Director of the newly established Institute of Physics, is in part compensated for, though his position has not been filled, by the appointment last October of Assistant Professor Lloyd P. Smith.

The reduction in items for maintenance of the departments, the absence of all increases in salary, and certain reductions in stipends for instructors and assistants, have enabled the administration to balance the University's budget for 1932-33 without a cut in salaries. The faculty has entered into this program of retrenchment with the best of spirit, and has undertaken to increase its teaching load beyond a desirable amount with the best of will. Yet we cannot go on, indefinitely, in this "frozen" state. We were fortunate this year in not having to bid against other institutions in order to retain members of the faculty called elsewhere. Furthermore, there are members of our faculty whose advancement is overdue, and in the interests of a sound morale we must have some leeway in making deserved promotions and increases in salary.

Further reductions in the number of our teaching staff and other employees without a serious impairment of efficiency will depend upon two things: the number of our students, and the reorganization of our course-offerings by the elimination of many special courses now taken by a relatively small number of students. With regard to the first of these things, it now seems probable that there will be some reduction in the number of new students admitted next September. This reduction will relieve pressure upon the departments which, under the new curriculum, are responsible for the prescribed courses open to freshmen. It will also mean a reduction in income which probably will more than off-set any possible reduction in staff, either immediately or in the near future. The conduct of the freshman courses is always the cheapest. Full professors give their introductory lecture courses to large numbers, and, when the recitation method is employed, the sections are in charge of instructors whose salaries are relatively low. Consequently, no reduction in the number of freshmen is calculated to effect a saving in the costs of instruction.

The second thing which might be possible is the elimination of many special courses which would allow members of the faculty to engage in more general courses registering larger numbers of students. If we should reorganize our courses on the year basis, as previously suggested, we might eventually find need for fewer professors and more assistant professors and instructors, and thus reduce the cost of instruction. In this connection it may be noted that of the seventy-two full professors now under appointment on the college budget, no fewer than twenty-

five will reach the retiring age of sixty-eight within the next ten years. In re-constituting our faculty to fill these vacancies as they occur, it will be necessary, I think, to make the majority of these replacements at lower ranks. This conclusion is based not only upon financial reasons, but also upon the extreme difficulty of finding mature scholars who are willing to move from places in which they are already well established. In the main, we must, I think, look for young and promising scholars within and without our own ranks who are worthy of appointment at the level of an assistant professorship, and with the prospect of promotion within a reasonable time after they have demonstrated their worth. I think we should also give more attention than we have in the past to the product of our own graduate school, especially to those who have left the University and have made good records elsewhere. While in common with all large universities, we are in constant danger of too much in-breeding, it is also a distinct advantage to be able to command the loyal support of our own men who know our ways and the distinctive Cornell ideals of teaching and scholarship.

In making our replacements with men of the assistant professorship grade, we must, of course, consider the service to be performed, and the persons available to render it. At present we have thirty-six assistant professors and seventy-two full professors. It would seem possible to bring these numbers nearer parity without necessarily reducing the efficiency of our staff as a whole.

In the matter of reorganizing the faculty of this College with a view to retrenchment it must not be supposed, however, that we are overstaffed in point of numbers. Our teaching staff is now virtually the same as it was in 1923-24 when I became Dean of the College, but during the same period for which records are available the number of student-hours, both terms, had increased from 76,668 in 1923-24 to 82,401 in 1930-31. Nor does this increase in teaching load include the marked increase in graduate work during the same period for which the members of our staff are responsible. In other words, it is fair to say that on the basis of our present organization of instruction in the College we were undermanned rather than overmanned before the reductions of our budget for next year were contemplated. Any further reduction is bound seriously to impair our efficiency unless it can be coupled with a reorganization which will place the responsibility for guiding and teaching larger numbers of students upon the senior members of the staff. While I believe that some changes of this kind would be desirable in the interest of greater efficiency and a sounder program of college work, I have no reason to think that it can be done effectively without a prompt restoration of the funds which we have forgone temporarily to meet the exigencies of the depression.

DEPARTMENTAL AFFAIRS

The release of Boardman Hall by the Law School and its allocation to this College as a new home for the Departments of History and Government will bring a welcome and long awaited relief to some of our departments. The one first to be served is the Department of Public Speaking which will now occupy five of the vacated offices on the second floor of Goldwin Smith Hall. The Department of Economics will give over two of its present offices to the Department of Romance Languages and will secure in exchange three other offices on the same floor.

In moving into Boardman Hall the Departments of History and Government will find space adequate to their special needs, including library facilities for their advanced students. It is also to be hoped that this homogeneous group will now revive the spirit of the Andrew D. White School of History and Political Science which for many years has been little more than a name.

The Professor of Rural Education, Professor J. E. Butterworth, has been named head of the Department of Education with a seat in the faculty of the College of Arts and Sciences. Under his leadership as Director of the Graduate School of Education a reorganization of the work in education with special reference to more adequate training of prospective high-school teachers is now under way, with the close cooperation of members of our faculty who are engaged in teaching subjects which also appear in the high school curriculum.

I reserve further comment upon the individual reports of the departments of the college for other occasions when the issues involved are pertinent.

THE STANDING COMMITTEES OF THE COLLEGE

The various committees of the College have served both faithfully and effectively. The Advisory Board for Underclassmen has been ably headed by Professor J. L. Woodward, chairman, who, although his term as a member of the Board expires this year, has agreed, with the approval of the Faculty, to continue his services two more years. The Committee has undertaken to codify its procedures, and the chairman has proposed two new practices which are now under consideration. The first of these is to abandon the present practice of placing new students on probation in December for unsatisfactory records. Instead of formal action by the Board on all unsatisfactory records of freshmen at mid-term, he suggests "(1) that delinquent freshmen merely be warned by interview with one of the deans or with the chairman, and (2) that the fact of this warning be communicated to their parents."

The chairman comments upon his proposal as follows:

"Freshmen whose mid-term records are unsatisfactory are already, according to present practice, warned in interview that they must do better work. The action of the Committee in putting such students on probation is defended on the grounds (1) that it has an added admonitory effect, (2) that it prevents the student from engaging in extra-curricular activities to the detriment of his work (but there are only a very few such activities open to freshmen that are carried on between December and February), and (3) that in some instances the Board is in a better position to drop the student in February if it has formally admonished him at an earlier date. Against the practice it may be urged, however, (1) that the action is based on mid-term marks which reflect rather the student's first groping reactions to new and different instructional techniques than his industry or his real abilities, (2) that the large number of probation notices sent out (115 in 1931, *i.e.* about one-quarter of the class) tends to reduce the disciplinary effect of the same action when taken later in the student's career, since 'nearly every student gets on probation some time,' and (3) that the uniform practice of placing delinquent freshmen on probation is an indiscriminating procedure employed at a time when the maximum of discrimination should be exercised. For some freshmen probation is too severe an action; it cannot cause them to increase their conscientious and perhaps soon-to-be successful efforts, and it unnecessarily worries them and their families. On the other hand, for some students probation is not severe enough. The interviewer is usually under the necessity either of explaining away the inevitable probation action or of attempting to supplement it. It is my belief that it would be better to leave the interviewer to exercise his discretion in giving the student the kind of warning that seems to be indicated. Parents could be notified that a warning has been issued, and, where the student's position appeared really precarious to the interviewer, the letter to the parent could contain an extra paragraph reporting that fact."

The second new practice proposed by the Chairman of the Advisory Board is the inauguration of a convocation of new students before registration, at which time "detailed instructions concerning registration procedure could be given, as well as information on such miscellaneous matters as the student's relation to his adviser, the rules with respect to changes in registration and the filing of petitions, cautions to be observed in connection with the lecture-system of instruction, the meaning of 'probation,' and the functions of the honor committee. . . . Such a convocation should make the task of the adviser and the College office much easier, the student would go to his adviser already warned about the language requirement, the limitation on the size of schedule, the courses open to freshmen and other details which, while stated clearly enough in the Announcement, always seem to need added emphasis to be actually appreciated by the new student."

The Honor Committee, in addition to the Dean and Assistant Dean, included this year Dr. Elson whose term expires in 1933, Professors Laubengayer (1933), Robinson (1935), Wagner (1934), and Marcham, who was succeeded by Woodward (1935). The students members were E. J. Fitzpatrick '32, Marion I. Glaeser '33, A. H. Huntington '34, W. H. Peace, 2nd, '32, Margaret Wilkinson '32, and H. N. Woodward '33.

The Committee has heard twenty-eight cases. This is a considerable increase over previous years, there having been, in 1927-28, nineteen cases; in 1928-29, thirteen cases; in 1929-30, fourteen cases, and in 1930-31, twenty cases.

The reason for this increase may be found in the abandonment of the honor system, and the resumption of proctoring by the faculty. It is, however, a disturbing thought that so much cheating is to be found among our students. The student members of the honor committee, feeling that the faculty should be more vigilant, have addressed the following communication to members of the instructing staff:

"Since the honor system of the Arts College has been suspended, fraud in examinations has become more common. We feel that many members of the faculty do not realize this. On the basis of general student opinion and our own observations, we may safely state that during the final examinations last June, and since, cheating in examinations has increased to a considerable degree.

"Manifestly it is an evasion of the issue for an individual faculty member to assume that cheating does not go on in his examinations. And equally obvious is it that cheating vitiates the entire force of the system of competitive grading.

"The undersigned, student members of the Honor Committee of this College, recommend and urge that:

1. All examinations be effectively proctored.
2. All cases of fraud be vigorously pursued, and brought before the Honor Committee of the College of Arts and Sciences."

It is to be hoped that closer oversight by the faculty and a more mature attitude towards their work on the part of some of our students will go far to remedy a situation which, while bad in some quarters, is probably not fundamentally serious. After all, it is the responsibility of the faculty to grade students in accordance with their merits, and having now resumed this responsibility in full, it is for them to devise means of testing their students in ways which will enable them to endorse the grades they report as having been fairly earned.

As one means of enabling the faculty to supervise examinations more effectively the honor committee has proposed, and the faculty has approved, the distribution of examination books by the department to students at the time examinations are given. Students will henceforth be required to deposit the examination blank-books with their instructors in advance of preliminary and final examinations.

The Goldwin Smith Lecture Committee, consisting of Professors Lane Cooper, M. L. W. Laistner, and O. G. Guerlac, Chairman, reports that twenty-six public lectures were given during the academic year upon a wide variety of subjects. Fourteen of these lecturers were from abroad. The attendance was gratifying, and the opportunities thus afforded to make contacts with distinguished scholars was, as ever, appreciated by both faculty and students.

The Scholarship Committee of the College which now awards the Cornelia L. Hall Scholarship for women, in addition to the three Boldt Memorial Scholarships for men, has consisted this year of Professors J. W. Hebel, C. W. Mason, and Preserved Smith, Chairman.

The constitution of the other standing committees of the college with dates indicating expiration of their terms of service is, in addition to the Dean and the Assistant Dean, as follows:

ADVISORY BOARD FOR UNDERCLASSMEN

W. H. French (1932)	H. E. Howe (1933)
B. W. Jones (1934)	E. A. Kubler (1934)
A. W. Laubengayer (1933)	H. S. Liddell (1932)
J. F. Mason (1933)	A. P. Whitaker (1934)
J. L. Woodward (1934) Chairman	

COMMITTEE ON ACADEMIC RECORDS

Harry Caplan (1932)	A. C. Haigh (1934)
J. R. Johnson (1933)	R. Matheson (1932)

C. C. Murdock (1932)
O. D. vonEngeln (1934)
H. P. Weld (1933)

Carl Stephenson (1934)
R. H. Wagner (1933)
J. L. Woodward, *ex officio*

COMMITTEE ON EDUCATIONAL POLICY

M. Bentley (1932)
G. W. Cunningham (1934)
L. C. Petry (1932)

J. P. Bretz (1933)
C. C. Murdock (1934)
H. D. Reed (1933)

The newly elected members are

R. E. Cushman (1935)

P. T. Homan (1935)

For the loyal cooperation of all members who have served on the standing and special committees of the faculty, I desire to express hearty thanks.

R. M. OGDEN,
Dean of the College of Arts and Sciences.

APPENDIX IV

REPORT OF THE DEAN OF THE LAW SCHOOL

To the President of the University:

SIR: I have the honor to submit the following report concerning the Cornell Law School for the academic year 1931-32.

The Law School completed this June the fortieth year of its occupancy of Boardman Hall, and in that month the School moved to the splendid quarters provided for it in Myron Taylor Hall. The moving of the Law Library was most efficiently planned and executed by a committee consisting of the law librarians, Mr. Willever and Mr. Morse, and Professors Wilson and MacDonald. The 70,000 volumes were carried from one building to the other and installed in their proper places by a corps of law students in 10 working days, together with the libraries of the members of the faculty, and the large number of pictures which hung in the library and class rooms. Myron Taylor Hall was open for inspection by alumni and visitors on June 17th and 18th, and a reception for alumni of the Law School was held in the new building on the afternoon of the 17th. The faculty had previously held an informal reception for members of the graduating class in Myron Taylor Hall upon the conclusion of their comprehensive examination on June 2nd. The 1932 Summer Session in Law opened in the new quarters of the Law School on June 20th. The formal dedication of the building is set for October 15. At that time Mr. and Mrs. Taylor plan to be present, and Hon. Cuthbert W. Pound, Chief Judge of the New York Court of Appeals, trustee of the University, and former member of the Cornell Law Faculty will deliver the principal address.

Myron Taylor Hall, completed and occupied, gives to the Law School a physical equipment generous in size, ideal in arrangement, and beautiful in detail as well as in general form and outline. It will allow for expansion of personnel and of library, while in Boardman Hall in recent years the Law School had been decidedly cramped. Naturally we hope that the desired expansion may be possible in the near future.

There have been no changes in the Law Faculty during the past year. Professor Whiteside was on sabbatic leave during the second term. Throughout the year members of the faculty have been engaged in various projects of writing and research. Professor Wilson is completing his book on Torts. Professor Stevens continues his work on the Commission on Uniform State Laws, and is progressing with his treatise on Corporations. Professor Thompson has been participating in the American Law Institute's Restatement of Contracts, and has brought out a valuable series of articles on the History of the Courts. Professor Whiteside has completed the New York Annotation of the American Law Institute's Re-

statement of Contracts, in which he has been generously aided by grants from the Heckscher Research Fund. This annotation has become the model for others throughout the country. The New York State Commission on the Administration of Justice, of which I am a member, has sponsored through a sub-committee of which I am chairman, a preliminary study of the reform of the Criminal Law of the State. Professors Cushman, Edgerton and MacDonald have assisted in this study, which will be submitted shortly to the Commission's Executive Committee. It is hoped that a more complete study will be authorized. I have myself undertaken this spring a study of the subject of extradition, under the auspices of the Harvard Research in International Law, which will extend over two or three years. Professors Laube, Robinson and Farnham have in hand books which they have agreed to write or edit in their various fields.

In my last report I informed you of our intention to put into effect in the Law School during the ensuing year a comprehensive examination for Third Year Students covering the entire work of the law course. This was done, and we feel that the experiment was a success. During March and April each Third Year Student was given a problem to work out in the library. He was given a week for the study. He then made a written report and later appeared for an hour's oral examination by a committee of three members of the Faculty. At the end of the year the Third Year Students took a written examination extending over four days. Questions were not grouped as to subject-matter, and many of them cut across several fields. Our belief was that the comprehensive examination would test the student's general legal knowledge and his capacity to handle real legal problems, and our experience of one year tends to confirm the belief. It is also thought that the comprehensive examination minimizes the importance of the division of the law into subjects for teaching purposes, and so induces a greater feeling of the unity of the law. We shall continue this form of examination for our candidates for graduation, with slight modifications based upon our experience this spring.

Our special Law School calendar which was authorized for the year just concluded, worked satisfactorily, and we shall operate on a similar calendar next year, opening 10 days earlier than the rest of the University, and scheduling our last examination 12 days before the conclusion of the regular examination period.

Following is the roster of the faculty in the 1931 Summer Session in Law and the courses taught:

- Herschel Whitfield Arant, B.S., B.A., M.A., LL.B., Dean of the Law School, Ohio State University,—Suretyship.
- William Everett Britton, A.B., A.M., J.D., Professor of Law in the University of Illinois Law School,—Bankruptcy.
- Edwin Merriek Dodd, A.B., LL.B., Professor of Law in the Harvard Law School,—Corporations.
- William Hursh Farnham, A.B., LL.B., S.J.D., Professor of Law in the Cornell Law School,—Property 1a.
- Herbert David Laube, B.L., A.M., LL.B., S.J.D., Professor of Law in the Cornell Law School,—Quasi-Contract.
- John Winchester MacDonald, A.B., A.M., LL.B., Assistant Professor of Law in the Cornell Law School,—Municipal Corporations.
- William Edward McCurdy, A.B., LL.B., S.J.D., Professor of Law in the Harvard Law School,—Contracts.
- William Herbert Page, B.A., LL.B., LL.M., S.J.D., Professor of Law in the University of Wisconsin Law School,—Wills.
- Gustavus Hill Robinson, A.B., LL.B., S.J.D., Professor of Law in the Cornell Law School,—Conflict of Laws.
- Henry Rottschaeffer, A.B., J.D., S.J.D., Professor of Law in the University of Minnesota,—Taxation.
- Clarence Milton Updegraff, A.B., LL.B., S.J.D., Professor of Law in the University of Iowa Law School,—Public Service.
- Horace Eugene Whiteside, A.B., LL.B., S.J.D., Professor of Law in the Cornell Law School,—Bills and Notes.

For the reasons stated in my report of last year we decided to replace our Summer Session of 11 weeks as conducted in former years with one of 6 weeks in 1932. It was necessary, however, to provide a further period of 4 weeks for students who had entered in June 1930 and had used the previous Summer Sessions with the understanding that they could graduate at the end of this summer. This has been done by offering an Informal Comparative Study of Remedies—Legal and Equitable, Contract and Tort—to be conducted by Professors Wilson, Stevens, and Whiteside at the conclusion of the regular Summer Session in Law.

During the past winter and spring I have made every effort to extend our sphere of influence to a wider group of Universities and Colleges throughout the east, south, and middle west. This I have done by correspondence with the Presidents or Deans of over 70 institutions, emphasizing especially our desire for their best men and calling attention to the scholarship opportunities available to a limited number of entering students; by visits made by me to Princeton University and Hamilton College, and by Professor MacDonald to the University of Rochester to talk to pre-law students; and by visits made by Mr. Ashbery, through the courtesy of the Alumni Office, to a dozen Colleges, in connection with trips to alumni centers. The trustees have assisted us by providing 5 additional first-year tuition scholarships for the year 1932-33. We believe from present indications that we shall have a remarkably strong group of first-year scholarship holders, and at the present time we have 15 per cent. more perfected applications for admission to the First Year Class than at this time last year.

A short time ago graduate work in law, leading to the J.S.D. and L.L.M. degrees, was organized at Cornell under the general direction of the Graduate School, but under the specific direction of a Law Group (Group H) composed of the members of the Law Faculty and the Chairmen of the Departments of Government, History, Philosophy and Economics. Professor Thompson is at present the Chairman of this Group. This next year there will be in residence 5 very promising candidates for the Doctorate. One of these men will hold a teaching fellowship, specially created, for the year, to take care of part of the work ordinarily carried by Professor Laube, who will be on sabbatic leave. We are very much handicapped, in competition with Harvard, Yale, and Columbia for first-class candidates for graduate work in law, by the fact that we have no adequate fellowships, and the men who are coming here, other than the one taking part of Professor Laube's work, are doing so at very substantial sacrifice because they want to work under the direction which can be obtained at Cornell. At least they will find a group of faculty members interested in making their work successful, and the best of physical facilities.

During the past 5 years I have slowly built up a small revolving loan fund for law students. Contributions have been made to this fund by private individuals and by the graduate and undergraduate Law Associations. This last year our distinguished alumnus and trustee, Walter P. Cooke, left to the University by his will the sum of \$50,000 to be used as a Loan Fund for law students and the income from the fund will be available next year. This will greatly help in meeting the financial difficulties which will confront students in the Law School. Mr. Mynderse VanCleaf, through the Cornellian Council, has also commenced the endowment of a scholarship in the Law School, which will be most helpful.

The annual Moot Court work of the First Year Class, directed by Professor Farnham, came to a successful conclusion with the final argument before a court composed of three of the Law School's alumni: Hon. William F. Bleakley, Justice of the New York Supreme Court, Hon. F. Walter Bliss, Justice of the New York Supreme Court, and Hon. Fred S. Reese, Judge of the Court of Common Pleas of Pennsylvania. Hon. Harrington Putnam made his biennial visit to the Law School in April to deliver a series of lectures on Admiralty and Maritime Law. Professor Joseph H. Beale, of the Harvard Law School, delivered the annual lecture on the Frank Irvine Foundation.

Accessions to the Law Library numbered 1964 for the year ending June 30, 1932, of which 417 were gifts. 186 volumes were added to the Bennett Collection of Statute Law. The League of Nations publications have been collected from the various libraries on the campus and added to the Myron Taylor Collection.

A very successful effort is being made to fill in all of the back numbers of these publications which we still lack. More than 200 volumes of this Collection have already been bound. During the year 789 law library volumes have been bound or repaired.

In June 1931 the Boardman Scholarship for the best work during the preceding four terms was awarded to Daniel Lewis Golden. For the academic year 1931-32 the First and Second Fraser Scholarships were awarded by vote of the Third Year Class to Leo Eli Falkin and Morris Karnowsky. The W. D. P. Carey Exhibition for the best work done in the Comprehensive Examination was won by Daniel Lewis Golden. The following students were elected to the Order of the Coif, honorary legal society: Julius F. Brauner, Leo E. Falkin, Daniel Lewis Golden.

The total registration throughout the past three years in the regular sessions of the Law School has been as follows:

	1929-30	1930-31	1931-32
Third Year . .	55	48	49
Second Year .	54	61	33
First Year . . .	99	71	74
Special	1	2	1
	<hr/> 209	<hr/> 182	<hr/> 157

Of the total of First Year students those also registered as seniors in the College of Arts and Sciences numbered 59 in 1929-30, 39 in 1930-31, and 36 in 1931-32. Of the students registered in the Law School 35% lived outside of New York in 1929-30, 34% in 1930-31, and 34% in 1931-32. 25 Colleges and Universities are represented in the student body, and the students in the Law School come from 14 states. The enrollment in the last three Summer Sessions in Law has been as follows: 1929-95; 1930-99; 1931-69. Between June 1, 1931, and June 1, 1932, 44 students were recommended for the degree LL.B., five with honors, and have had that degree conferred upon them by the Trustees.

Between June 1, 1931, and June 1, 1932, 19 law students were dropped from the Law School. Probation is no longer used in the Law School except for those taking the combined Arts-Law courses who have not yet received the A.B. degree.

CHARLES K. BURDICK,
Dean of the Law School.

APPENDIX V

REPORT OF THE DIRECTOR OF THE MEDICAL COLLEGE

To the President of the University:

SIR: I have the honor to submit the following report on the medical college for the year 1931-32.

The academic year that has now been completed marks the close of a chapter in the history of the medical college. It is the thirty-third year of the college, which began instruction in 1898, and has continued until the present to occupy the building at First Avenue between 27th and 28th Streets.

The medical college is to begin its next academic year in association with the New York Hospital, as with the completion of the new plant the New York Hospital-Cornell Medical College Association goes into actual operation, affecting profoundly the activities of both the medical college and the hospital.

The new buildings which the departments of the medical sciences are to occupy are to be ready on July first, and the library of the medical college was moved into its new quarters during June. During July the laboratories occupying the main college building, the Loomis laboratory and the old university building on

26th Street will be moved into their new and commodious quarters. The entire plant of the New York Hospital will be ready for occupancy by the clinical departments by August first, and plans are complete for beginning the academic year on September 27, 1932, in the new plant.

It may be imagined but not described what an enormous number of details have had to be studied and decided in bringing to readiness the great plant that has been under construction during the past four years. There has been throughout this period a remarkable cooperation of the architects and builders with those who are to carry on the future work of the medical college and hospital. Great credit is due to Mr. Henry R. Shepley of the architectural firm of Coolidge, Shepley, Bullfinch and Abbott, not only for designing a group of buildings of surpassing beauty, but also for striving constantly to meet every demand that was proposed by those who are to occupy all parts of the laboratories and hospitals. Mr. Shepley's extensive experience in planning other institutions dedicated to medical teaching and research as well as to the care of patients, was invaluable in meeting the exacting demands placed upon the architects in carrying forward the project of the Association. He has performed his task so as to provide magnificent facilities for every field of medical practice, study, and teaching, and at the same time has given closest attention to the aesthetic side of his work, considering carefully color, materials, and form in order to render a fine, harmonious, and fitting appearance to all parts of the plant. It may not be doubted that the physical surroundings in which the activities of the medical college are to be conducted in the future will have a lasting influence for good on the spirit of the students, as well as on the faculty and staff. The encouragement by the officers of the New York Hospital of those engaged in planning the buildings toward producing a beautiful as well as a useful structure should be reckoned by the University as part of the conspicuous contribution the hospital is making in the field of medical education.

The builders, Marc Eidlitz and Son, have also contributed much beyond the mere erection of the plant. This in itself has been a task of great magnitude, requiring a perfection of organization which they have maintained throughout. The unique experience of this splendid firm of builders in the construction of hospitals and laboratories has been of inestimable assistance in deciding many details of construction. The appreciation of Mr. George Brown, vice-president of the firm, who has had direct charge of the building operations, of the detailed requirements of the workers in every phase of the future organization has been of great value.

Close attention has been given to the arrangements of parts of the plant by those who are to occupy and operate them, and much thought and energy have been expended by the various department heads and their staffs. It is a pleasure to pay tribute to the enthusiastic and encouraging cooperation that has been given by the members of the faculty, which has greatly lightened the burdens entailed in planning and organizing the great project upon which the medical college is about to embark in association with the New York Hospital.

The fact that the medical college is to move from its original buildings and to enter actively into association with the New York Hospital is not the only reason for considering the coming year as opening a new chapter in the history of the college. A number of important changes in the faculty and the reorganization of the clinical departments takes place with the new year. Radical changes in the faculty are caused by the retirement of the heads of five major departments on account of age, and the transfer of the head of another to a newly created department of the college. Professors Ewing, Lusk, Conner, Gibson, and Russell retire because of age, and their successors have been appointed as follows: Dr. Eugene L. Opie, professor of pathology, Dr. Herbert S. Gasser, professor of physiology, Dr. Eugene F. DuBois, professor of medicine, Dr. George J. Heuer, professor of surgery, and Dr. George S. Amsden, professor of psychiatry. Dr. Elser becomes professor of applied pathology and bacteriology and Dr. John M. Neill succeeds him as professor of bacteriology and immunology. Professor Charles L. Dana, Professor Alexander Lambert, and Professor Otto H. Schultze also retire on account of age. Other retirements from the faculty for various reasons are Dr. Alfred S.

Taylor and Dr. James M. Hitzrot, professors of clinical surgery, Dr. Arthur F. Coca, professor of immunology, Dr. Elise S. L'Esperance and Dr. James Denton, assistant professors of pathology. Dr. Henricus J. Stander takes up his active duties as "full time" professor of obstetrics and gynecology, while Dr. George Gray Ward, head of this department, becomes professor of clinical obstetrics and gynecology.

It is needless to say that these changes in the faculty will have a profound effect on the medical college. Several of those retiring have been members of the teaching staff since the inception of the college, and their active participation in its affairs will be greatly missed. The valuable services that have been rendered by this outstanding group are well known to you and to the trustees, and their conspicuous contributions not only to the university but to the entire world of medical education need no emphasis in this report.

Besides those who have been mentioned as newly appointed to the faculty of the medical college there are numerous new appointments in the clinical departments. Many of these appointments have been recommended to the trustees in order to bring to the faculty members of the staffs of the New York Hospital and the Lying-in Hospital, who have not been previously connected with the college. The reorganization of the clinical departments on a university basis has also necessitated a number of appointments to the faculty of teachers who are to devote their full time to the work of the college and hospital. As the names of all those newly appointed to the faculty are to appear in the announcement of the medical college soon to be issued, they are not included in this report.

During the past year the medical faculty lost through death Dr. George Thompson Elliott, professor of clinical medicine, Department of Dermatology, Emeritus, and Dr. Arthur H. Cilley, assistant professor of clinical surgery, Department of Orthopedic Surgery.

The educational and research activities of the various departments of the college have been carried on successfully and reports have been received from the head of each department giving an account of the accomplishments of the various members of the staff. These reports have been studied, and need not be considered in detail here, as they have been placed on file.

There were 241 students, candidates for the degree of Doctor of Medicine, sixty of whom were granted that degree at Commencement on June 2, 1932. On this occasion the address to the graduates was delivered by Dr. Walter L. Niles, professor of clinical medicine, and former dean of the college. Twenty-five of the first year class received instruction from the faculty of medicine at Ithaca. Every student of the first and second years in New York completed their work without any failures or conditions, a unique record in the college. This record is indicative of the care and judgment exercised by the Committee on Admissions, and is also a tribute to the teaching staff giving instruction to these classes. There were also six candidates for the degree of Doctor of Philosophy, one of whom was granted this degree, and nine students registered as graduate students not candidates for a degree.

The new facilities of the medical college afford splendid opportunities for the training of advanced students, and expansion in this direction should be an important objective in the future. It is the policy of the college to offer its facilities to a selected group of advanced students who desire to undertake serious study over a relatively long period rather than to emphasize short courses in various restricted special fields. In order to carry forward such a program further support is required, especially in some of the non-clinical departments, notably biochemistry, pharmacology, and bacteriology. An expansion of the department of Public Health and Preventive Medicine is also an urgent need of the college. It may seem wise to effect a change in the organization of the graduate school as pertaining to the medical college, following the example of the law school, and the college of engineering, by setting up a graduate school of medicine. Now that the clinical departments have been organized on a university basis, candidates for advanced degrees might well be accepted in all departments of the college, and the degree of Master of Science be included in those granted on recommendation, of the medical faculty.

The curriculum of the medical college, which has been the subject of study during the past three years, has been materially altered, and a new curriculum has been adopted by the faculty which will go into effect in part with the next academic year, and completely the following year. The changes affect especially the instruction of the last two years of the course, and are made possible by the greatly expanded facilities for clinical training provided by the New York Hospital. The academic years, with the exception of the first year, are divided into quarters of eight weeks each, and much of the instruction is given to groups of students consisting of one quarter of each class. A change has also been made in the amount and distribution of free time available for elective work.

A plan is being initiated also which provides opportunities for medical study during the summer vacations for students desiring to engage in such work. This plan, at present applying only to the summer preceding the fourth year, may be extended in the future, and may result in shortening the total time necessary to complete the required courses, freeing time for elective work in the college or in other institutions, or actually shortening the time required to obtain the degree of Doctor of Medicine.

During the past year the administrative duties of the dean have been taken over to a large extent by Dr. William S. Ladd, associate dean, who will extend somewhat his functions in the future. Dr. Ferguson, secretary of the faculty, is to give his attention largely to the question of the applicants for admission to the college, as he has in the past, and Miss Andresen, secretary of administration, is to carry on the relations of the college with the alumni, as one of her duties in the new plant.

The medical college lost a valuable officer in January, by the death of Mr. J. Thorn Willson, for many years business manager of the college and secretary of the council. Mr. Willson served the college with great faithfulness and conducted its business affairs with splendid judgment and economy. His successor, Mr. Wallace Lund, took office on April 1, 1932, and has entered upon the many problems involved in establishing the college in its new plant with much ability. He takes up his work with several years' experience as assistant to the director of the hospital-college association.

It is not possible to exclude from this report reference to the difficulties engendered by the financial situation. Although a detailed statement regarding the problem of budgets for the coming year is not properly part of this report, it should be said that the financial situation presented problems that had to be shared by all heads of departments. With an income less than had been expected and with a large increase in the general expenses of the college to be met in the new plant, extensive cuts had to be made in the amounts which the heads of departments had reason to expect to have in their budgets. The situation was met, so that no reduction of salaries was made of those who were full time members of the teaching staff, but expected expansion had to be curtailed. A reduction of salaries and honoraria paid to part time teachers was necessary. The heads of departments have cooperated with fine spirit in postponing some of the developments they had planned. The fact that the clinical facilities of the hospital cannot be fully provided, as planned, was also a disappointment to the heads of the clinical departments. The spirit with which these conditions have been met has been admirable and deserves to be commended.

The medical college has received several new funds for special work in various fields, including funds for the continuation of an extensive study of leucemia and allied conditions under the direction of Dr. Opie, from an anonymous donor. This fund, part of which is being transferred from the University of Pennsylvania, will allow this work to continue for several years. The International Health Division of the Rockefeller Foundation has also made a grant to the college to support for three years Dr. Opie's experimental work on problems of immunity in tuberculosis. The Josiah Macy, Jr. Foundation has granted funds for the support of the work of Dr. Churchman, previously supported by grants from the Chemical Foundation. Although the funds available are not half those previously available, they will allow Dr. Churchman to continue his work at least during the coming year on a restricted basis. Other special grants from the National Research

Council, the National Tuberculosis Association and from the Rockefeller Foundation are being continued. Several holders of National Research Council fellowships have been accepted as students by heads of departments.

The Cornell Clinic is to close its activities on August 15, after ten years of successful operation. The clinic comes to the end of the fiscal year, June 30, with a deficit of approximately \$2,000, but an amount sufficient to meet this deficit has been reserved in the appropriation of \$20,000 in the college budget for the purpose of conducting research in the clinic and of meeting any deficit that may occur.

The principles of providing medical service for persons of moderate means successfully worked out in the Cornell clinic are to be incorporated in the outpatient department of the New York Hospital.

In conclusion it may be said that the final year of the medical college in its original setting has been completed successfully and that the preparations for initiating the work of the college in its new surroundings are well advanced. All those taking part in moving the medical college to its new site and inaugurating its work there are looking forward with expectation and enthusiasm toward the future.

G. CANBY ROBINSON,
Director of the New York Hospital-
Cornell Medical College Association.

APPENDIX VI

REPORT OF THE SECRETARY OF THE ITHACA DIVISION OF THE MEDICAL COLLEGE

SIR: I have the honor to submit herewith the report of the Ithaca Division of the Medical College for the academic year 1931-32.

There were twenty-six students admitted to the Ithaca Division of the College this year. Of these, seventeen came from the College of Arts and Sciences of Cornell University, six of them having graduated and eleven being registered in the senior class. The remaining nine students came from eight different institutions. There were two women in the class. Again this year, all of the students satisfactorily completed the year's work. Since the limitation in the number in the first year class and the establishment of a selective system, very few students fail to pass each year's work. This is a marked contrast to the condition of affairs which existed when all who had entrance requirements were accepted in the first year class. There has been no change in the method of selecting students for admission as outlined in my last report.

Because of financial embarrassment, every year recently some students have been forced to withdraw or to postpone for a year or more, the continuation of their medical course, and this has occurred in spite of the care of the Committee on Admissions to ascertain beforehand whether each student would have sufficient money to see him through to graduation. Every year too, the Committee on Admissions must refuse admission to desirable students, who can not see their way financially, through the four years of the medical course. This emphasizes the need for scholarships and for a loan fund for worthy students who become financially embarrassed.

The schedule of the first year of medicine is so exacting that there is little opportunity for medical students to engage in research, even if at this stage of their career they had sufficient background of knowledge to warrant encouragement along this line. Nevertheless, we in Ithaca are particularly fortunate in that the medical students find themselves in a research environment. They are brought into close association with the graduate students of whom there are many in each of the departments in the medical college, and this living in the atmosphere of investigation can not help but stimulate in these students the research spirit. The methods of research are taught; the desire to seek the unknown is developed.

In the Department of Anatomy there has been no notable change in faculty or method of teaching. The collections continue to grow slowly and notable additions have been made to the Wilder Brain Collection. To protect these irreplaceable specimens a fireproof room has been built in the sub-basement of Stimson Hall. Through the generosity of one of our alumni, a fireproof safe also has been provided for some of the most valuable specimens. A number of important acquisitions have not yet been adequately described for lack of time, funds, and assistants. The fluoroscope which was added to the department a few years ago is proving increasingly useful, both for teaching and research. The greatest needs are increased staff so that the teachers may be less overburdened with routine duties and may have more time for advanced study and research.

There have been 365 course registrations in the Department of Anatomy this year. In addition to this there were 23 graduate students registered for advanced degrees, four for majors and nineteen for minors. There have been eight papers published.

In the Department of Histology and Embryology, Professor B. F. Kingsbury, the head of the Department, was granted a Sabbatical leave of absence for the second term. This is the first time that Dr. Kingsbury has been able to avail himself of the Sabbatical leave in many years. The last previous leave when granted could not be taken advantage of because of sickness and death in his family. His stimulating influence has been keenly missed in the Department which, in his absence, has been ably directed by Assistant Professor Adelman.

There were 374 course registrations in the Department this year, which is slightly less than last year, due in part to the temporary suspension of the course in Organology. Of the registrants in the Department, 39 were graduate students, of whom 10 were taking majors and 9 minors. The work in the Department has not materially changed from previous years and the needs are the same as outlined in previous reports. There were three papers published in the Department this year and four are in the process of publication.

Professor Liddell, of the Division of Physiology in the Department of Physiology and Biochemistry, reports the satisfactory progress of the work, both instruction and research. There has been no radical change in viewpoint during the recent years, but rather a steady progress toward the development of a type of instruction and general program of research which would most completely provide for the needs of arts, graduate and medical students. This has been possible in view of the intimate relation of the Ithaca branch of the Medical College to the College of Arts and Sciences and the Graduate School. During the last few years the experimental investigations of the departments have broadened in scope so that at present there is in progress research in endocrinology, tissue metabolism, biological effects of irradiation, and problems in the fields of animal behavior and the physiology of the central nervous system. This broad field of investigation has attracted a goodly number of serious research students, including those who have selected a minor in physiology as well as those who are majoring in the subject. Instruction in the Department has been and continues to be the result of careful testing. The work in Physiology is now arranged to carry the undergraduate students through a systematic study which begins in the Sophomore year and prepares for graduate study of physiology or for entrance to the medical school. This sequence of courses in Physiology is carefully integrated with instruction in the physical sciences and other aspects of biology. The Department believes that the best preparation for research in physiology coincides with the best preparation for entrance to medical school. The instructors feel that their relation to the premedical student is particularly intimate and that by studying and understanding his needs they are improving and liberating their physiology curriculum.

There were 490 course registrations in Physiology this year. Of these, 355 were taking the elementary course in Human Physiology. There are 28 graduate students. Of these 4 were taking majors and 24 minors in Physiology. There have been five papers published this year.

In the Division of Biochemistry of the Department of Physiology and Biochemistry, Professor Sumner reports that the teaching has proceeded as usual

with more students than ever before, thus causing overcrowding in the laboratory. Professor Sumner has given again this year, a course in Special Chapters in Biochemistry which has not been given for some years now. This attracted a considerable number of advanced students.

There were 228 course registrations in Biochemistry this year. In addition there were 36 graduate students registered, of whom 33 were taking minors and 3 majors. The direction of this amount of graduate work in addition to undergraduate teaching is far too much for one professor. With the return of Dr. Hand next year, it is possible that some slight relief may be obtained. Research is very active in the Department; there have been six papers published and a considerable amount of unpublished material remains.

From the preceding reports from individual departments it is quite evident that the considerable number of graduate students in addition to the undergraduate instruction that is given is far too much for the size of the instructing staff, especially the professorial staff. It is also clear that to give proper attention to this number of graduate students in addition to the regular undergraduate instruction, is not only burdensome, but interferes materially with the productiveness of the professorial staff.

Stimson Hall has been used to capacity throughout the year, not only for the lectures by the various departments outside of Stimson Hall, notably Hygiene, but the amount of graduate work in progress has filled every bit of laboratory room.

The Van Cleef Memorial Library has continued its steady growth supplementing in important fields the collections of books dealing with biological sciences located elsewhere on the campus. The privileges of the stacks are reserved to the Faculty and other research workers, but books for medical students and others are withdrawn from the library and issued from the College Office, in this way extending the usefulness of the library.

Each year the members of the Faculty have been enabled to carry on research work in a more extended and more adequate manner through the aid of grants from the Sarah Manning Sage Research Fund. Moreover these grants have made possible better publication of the results of investigations. This year for the first time the investigators in Stimson Hall have also been aided by grants from the Solon P. Sackett Research Fund. The importance of such aid cannot be overestimated.

I want to record again my appreciation of the hearty spirit of cooperation from all members of the staff. This was particularly evident when the demand for retrenchment became imperative this spring, professors, and instructors alike, being willing, not only to go without needed apparatus and materials, but anxious to cooperate by giving extra time to make possible the maintenance of high standards of work by a staff reduced in numbers.

ABRAM T. KERR,

Secretary of the Ithaca Division of the Medical College.

APPENDIX VII

REPORT OF THE ADMINISTRATIVE COMMITTEE OF THE NEW YORK STATE VETERINARY COLLEGE

To the President of the University:

SIR: We have the honor of submitting the following report of the work of the New York State Veterinary College for the academic year 1931-32.

The work of the College has gone forward during the year without interruption. Fortunately there has been only a small turn-over in the staff. At the beginning of the year, Dr. Alexander Zeissig, assistant professor of bacteriology, returned to his duties after a profitable year in the laboratory of Prof. Hans Sachs at the University of Heidelberg in Germany, replacing Dr. W. T. Miller, who had been acting in Dr. Zeissig's absence. There were no other changes in the staff except in several assistantships.

The work of the College can conveniently be divided into three parts: (a) teaching, (b) research, and (c) extension service. These will be discussed in turn.

TEACHING

The teaching load of the faculty of the College has never been greater. A total of 209 students who expect to be candidates for the veterinary degree were registered in the College during the year. This represents an increase of 35 over the previous year, of 74 over the year before that and of 129 over the registration of ten years ago. In addition to the veterinary students many agricultural, pre-medical and arts students are given instruction in certain courses, and a considerable group of graduate students now register for work with some of the staff of the college. Inasmuch as there has been practically no increase in the size of the teaching staff during the last ten years, it can be appreciated that this loyal group has been bearing an increasingly heavy load during this period. The majority of the older, more mature members have a greater teaching load than they should be called upon to bear. The inevitable result of this situation is that some of them have almost no time, and most of them have too little time, for the research work which they are qualified to pursue. Furthermore the teaching work is suffering in that it is impossible to teach well large groups of students without adequate assistants. This is particularly true in clinical teaching but also applies to the laboratory work in the basic sciences of anatomy, physiology, and bacteriology.

ADVANCED ENTRANCE REQUIREMENTS

Beginning with the next academic year, students entering the college must have had at least one year of academic work of satisfactory nature, consisting of 30 credit units in which there must be at least 6 hours of inorganic chemistry, 6 hours of English and 4 hours of a modern language. It is anticipated that these additional requirements will bring to us a more mature student and one who has developed the mental discipline necessary for a better appreciation of the basic sciences of medical education. Readjustments of the curriculum have been made and others are contemplated to fit progress in the educational standards. The entering student already will have had some of the training in fundamental subjects which we have been compelled in the past to give him. This releases more time for instruction in strictly professional subjects. It is planned to give more practice in his clinical subjects, and by dividing the classes into small groups, according to various specialties in which he is interested, to give more intimate and better instruction than has hitherto been possible.

The Flower Veterinary library continues to be a very important link in our educational plan. A full time librarian renders the library accessible to Veterinary and other students and its use becomes greater year by year. An increase in the

endowment of the library is desirable since the increased cost of medical publications has absorbed too great a proportion of its income and the fund for books is inadequate.

RESEARCH

Practically every member of the staff of the college is engaged in research work which is prosecuted as rapidly as his teaching and administrative duties will permit. Only two or three members of our staff of about 30 are devoting a major part of their time to research projects; the others are snatching a few hours here and there for this phase of their work. Under such conditions, concentration of thought upon scientific problems is difficult and progress is necessarily slow. We believe that, in spite of the conditions, excellent progress is being made in the various research programs. The results of this research are published in various scientific journals and reprinted in the appendix to the annual report of the college to the Governor and the Legislature of the State of New York. Details of these researches can be found in this report, which is available for distribution to those who are interested. Space here will not permit of giving even a brief resumé of these studies but we would like to say that they deal with such immediately practical subjects as the control of infectious abortion and of mastitis in cattle, of bacillary white diarrhea, pox, coccidiosis and helminths in poultry, the diagnosis and the ultimate control of Johne's disease or paratuberculosis of cattle, the improvement of the tuberculin test, and the development of better surgical and medicinal procedures for the cure and alleviation of various other diseases of livestock. In addition to these subjects which offer immediate practical applications, fundamental researches in serology, in diseases of the nervous system, in diseases of the blood, in diseases due to nutritional deficiencies, and on problems connected with the growth and metabolism of pathogenic bacteria, are in progress.

At the present time the new poultry disease investigational plant authorized by the Legislature of 1931 is nearing completion and is already being used. This plant will supply facilities, lacking until this time, for the housing and care of flocks of birds maintained under conditions comparable to those in commercial flocks, and also facilities for the incubation and rearing of chicks under controlled conditions so far as disease is concerned. The work on poultry diseases can now be greatly expanded.

EXTENSION SERVICES

The extension service of the college is conducted partly by direct contact with animal owners but mostly thru practicing veterinarians, who by education and training are qualified to understand and apply the results of newer researches in animal diseases. Certain members of the staff are in constant demand as speakers before veterinary organizations, and organizations of breeders. This is particularly true of those whose special researches deal with infectious abortion and mastitis of cattle, and with diseases of poultry. It is impossible to accept all such invitations but so far as time can be found for it in the press of other activities, this demand is met.

For many years the college has held during January a conference for the veterinarians of the state. Men prominent in the veterinary and allied professions are obtained as speakers, and the staff of the college is drawn upon to present to the assembled practitioners the newer discoveries in the theory and practice of medicine. This service has always been popular and during the last few years nearly a half of the active profession of the state has attended. The conference last January was as successful as usual, and as well attended. Just preceding the opening of the conference, a two-day short course on poultry diseases was held. This was well attended and enthusiastically received.

The several diagnostic services conducted by the college continue to be well patronized. Our general diagnostic laboratory made over 25,000 examinations, a large share of which consisted of blood tests for infectious abortion. The two poultry diagnostic laboratories, one at Ithaca and one at Farmingdale, conducted their usual number of examinations and in addition furnished about 125,000

doses of chicken pox vaccine for use on flocks of the state. That this latter service is appreciated is indicated by the fact that requests for nearly 300,000 doses of this vaccine have been received for use next year.

The experiment station has continued the supervision of representative herds in all parts of the state in order to demonstrate what can be done in the control of that devastating disease, infectious abortion. A branch laboratory was established during the last year at Salamanca in cooperation with the Department of Agriculture and Markets in order to bring the necessary laboratory service nearer home to a large dairy section of the state which is too remote from Ithaca to obtain the best service.

NEEDS OF THE COLLEGE

Some of the needs of the institution have already been indicated. All departments of the college are now reasonably well housed with the exception of Pathology and Bacteriology. For more than ten years the need for a building to house this department has been stated and restated. Dealing with the causation and the mechanics of disease processes, the work of this department is of fundamental importance. For years it has been housed in very restricted quarters, inadequate for teaching purposes and especially deficient in facilities for its research work. It is hoped that at a time not far distant funds can be provided for this building. The most pressing needs in personnel specifically are, a professorship in parasitology, an assistant professorship in bacteriology, an extension worker in poultry pathology, an assistant librarian, and an instructor in anatomy. Finally there is need for an improvement in the salary scale which will attract promising young men and set a goal which will stimulate them to prepare themselves by the long and expensive process which is necessary in medical education for the responsibilities of improving veterinary education. As we have pointed out, the college already is on its way to a higher plane educationally. Better veterinarians, rather than more of them, is our goal. The training of better men will require better teachers, and the attraction and retention of such teachers will not be easy until reasonable financial security can be offered them.

W. A. HAGAN,
R. R. BIRCH,
EARL SUNDERVILLE,

Administrative Committee of the Veterinary College.

APPENDIX VIII

REPORT OF THE NEW YORK STATE COLLEGE OF AGRICULTURE AND OF THE CORNELL UNIVERSITY AGRICULTURAL EXPERI- MENT STATION

To the President of the University:

SIR: I have the honor to submit a report of the New York State College of Agriculture and of the Cornell University Agricultural Experiment Station for the fiscal year 1931-32.

DEAN MANN BECOMES PROVOST OF THE UNIVERSITY

Shortly after the opening of the year, there took place an administrative change of the greatest importance to the New York State College of Agriculture. On July 31, 1931, Dean Albert R. Mann closed his career as Dean of the Colleges of Agriculture and Home Economics to assume the newly created office of Provost of Cornell University.

The fifteen years during which Dean Mann served as administrative head constitutes a period not only of notable growth, in physical equipment, in staff, and in range of work accomplished, but also of distinct gain in the effectiveness of the services rendered. During this period at least eighty per cent. of the present layout of buildings and equipment was realized, the staff much more than doubled in size, and the annual income of the colleges was trebled. While teaching, extension, and research were well established as institutional functions in 1916, the latter two were relatively undeveloped, and in the years intervening since then these functions have set their direction and attained a large development. In all of these matters Dean Mann exercised a wise and vigorous leadership, educating both the farm constituencies and the responsible state officials in regard to the possibilities of service by the Colleges and inspiring the staffs of these institutions with his own devotion to public welfare. Having held responsible posts in two administrations in the College of Agriculture preceding his own, Dean Mann already has to his credit a long service which has earned for him the gratitude of the State and the devotion of his colleagues. Fortunately, the State Colleges are included within the wider range of responsibilities to which the University has now called him.

The University Board of Trustees placed the Director of Resident Instruction, Dr. Cornelius Betten, in charge of the college administration until June 30, 1932, and later selected as permanent Dean, the appointment beginning on July 1, 1932, Dr. Carl E. Ladd, who since 1924 has held the position of Director of Extension of the College.

OTHER STAFF CHANGES

It is with the greatest regret that record is made of the death of Professor Robert M. Adams on December 12, 1931. Mr. Adams was appointed assistant professor of farm crops on January 1, 1920, and later became extension assistant of vegetable crops. Not only was Professor Adams successful in his extension work with adults and with 4-H club members, but his character impressed people far beyond the range of his immediate professional interest. Without doubt, his "Rural Rhymes," published and spoken, served as a means through which large numbers of persons became acquainted with the quality of his personality.

In the current report of the New York State College of Home Economics, appropriate reference is made to the death of Martha Van Rensselaer on May 26, 1932. Miss Van Rensselaer began her university service in the College of Agriculture in 1901, when she was asked to organize extension work with farm women. This was done through bulletins, reading courses, and study clubs. In 1906, the first winter course for farm women was held. Miss Van Rensselaer gave the first credit course in home economics in 1903, and in 1907, together with Miss Flora Rose, she set up the Department of Home Economics. When in 1925 the department became a college, Miss Van Rensselaer was made its first director, and every stage in the development of this field of work in the University therefore took place under her administration. She remained a member of the Faculty of Agriculture also, and both Colleges will always hold her in great honor, both for the pioneer work of organization of home-economics education and for the high quality of all the later achievements.

Dr. Carl E. Ladd, Director of Extension, having been given leave of absence on July 1, 1931, to accept temporary appointment as Deputy Commissioner of Conservation in the State Conservation Department, found it possible to complete his special service and to resume his work at the College on October 1, 1931.

Record has previously been made of the absence of Dr. Harry H. Love, who is serving the National Chinese Government for a period of three years in a program of plant improvement. During 1931-32 Dr. Love's position at the College has been filled by Dr. John Huntington Parker, of the Kansas State Agricultural College, who has made a fine contribution to the work of this institution. For 1932-33 this position is to be filled by Dr. Herbert Kendall Hayes, of the University of Minnesota, who has been appointed acting professor of plant breeding.

Professor Samuel N. Spring resigned from his position as professor of silviculture on January 31, 1932, to become Assistant Dean of the New York State

College of Forestry at Syracuse University. Professor Spring took up his work here in September, 1912, and has given nearly twenty years of most effective service. The College has been fortunate in replacing Professor Spring by the appointment on February 1, 1932, of Ellwood Wilson, who has a distinguished record as forester of the Canada Power and Paper Corporation and in other scientific fields, as acting professor of silviculture.

Assistant Professor Cedric H. Guise returned to his work in the Department of Forestry on October 1, 1931, after two years' absence for service as Assistant Director of the Forest Education Inquiry conducted under the auspices of the Society of American Foresters and financed by a grant of funds from the Carnegie Corporation. The report of the Inquiry, already in press, will constitute a significant contribution to the cause of forestry education.

In the Department of Agronomy, Professor Axel F. Gustafson has transferred the major part of his time to the land-survey and classification project, particularly to the preparation of the crop and soil-management bulletins. His work in extension has been provided for by the appointment of Dr. Ernest Van Alstine as extension professor of agronomy, the appointment having become effective on September 1, 1931. Dr. Van Alstine is a graduate of Michigan State College, did his graduate work at Illinois University and the State University of New Jersey, was associate agronomist in the Illinois Agricultural Experiment Station, and, more recently, was professor of agronomy at the University of Vermont.

Assistant Professor Harvey E. Thomas, of the Department of Plant Pathology, after service in the University since 1919, resigned on October 31, 1931, to accept a similar appointment at the University of California. The vacancy created was filled by the appointment of Dr. Earl Martin Hildebrand as assistant professor of plant pathology on March 15, 1932. Dr. Hildebrand comes from the University of Wisconsin and from further experience in a commercial experimental field laboratory of plant pathology.

In the Department of Vegetable Crops, the death of Professor Robert M. Adams and the temporary transfer of Professor Francis O. Underwood to a special phase of the soil survey have led to further changes. Dr. George Joseph Raleigh, a graduate of the Kansas State Agricultural College, the University of Nebraska, and the University of Chicago, was appointed acting extension assistant professor of vegetable crops from May 1, 1932, through the year 1932-33, and Arthur John Pratt was advanced as extension instructor to take over most of the work formerly carried by Professor Adams.

In the Department of Pomology, the temporary transfer of Extension Professor Joseph Oskamp to special work in the orchard soil survey led to the appointment of John Taylor Bregger, assistant horticulturist at Washington State College, as acting extension assistant professor of pomology for the year 1932-33.

In the Department of Entomology and Limnology, Extension Instructor Burl A. Slocum resigned on December 20, 1931, to take charge of the entomological work in the University of Nanking, China, and this led to the reappointment on January 1, 1932, of George H. Rea as extension assistant professor of apiculture.

Beginning in September, 1930, leave of absence was given to John A. Reynolds, who has served the College and the State effectively as assistant state leader of junior extension since July 1, 1927. The illness which forced Mr. Reynolds to withdraw from service resulted in his death on July 25, 1932, and a most promising worker is thereby lost to our ranks. The vacancy resulting has been filled by the appointment on October 1, 1931, of Mr. Albert Hoefler, formerly county club agent in Rensselaer County.

The following promotions have been made in recognition of effective service: James E. Knott, from research assistant professor to research professor of vegetable crops and investigator in vegetable crops in the Experiment Station; Clifford N. Stark, from assistant professor to professor of bacteriology and bacteriologist in the Experiment Station; Ernest V. Staker, from research instructor to assistant professor of soil technology and assistant soil technologist in the Experiment Station; Herman J. Brueckner, from instructor to extension assistant professor of dairy industry; Alexis L. Romanoff, from research instructor to research assistant professor of poultry husbandry and assistant poultry

husbandman (embryology) in the Experiment Station; Edwin S. Harrison, from instructor to assistant professor of animal husbandry and assistant animal husbandman in the Experiment Station.

In the Department of Plant Pathology, Dr. Paul Donald Peterson, formerly of the Office of Cereal Crops and Diseases in the United States Department of Agriculture and Pathologist for Kopper's Research Corporation, was appointed acting assistant professor of plant pathology and assistant plant pathologist in the Experiment Station during the absence of the head of the department, Dr. Louis M. Massey, in 1932-33. Assistant Professor Carl E. F. Guterman was made acting head of the department for the same period.

THE STATE APPROPRIATIONS

The total state appropriations made by the Legislature of 1932 for the maintenance of the College during the succeeding year are less than those for 1931-32 by the amount of \$412,964, and the difference lies largely in the absence of provision for further building construction. Personal-service items were left practically as of the year before, the total (not counting the personal service included in the special undistributed maintenance items) being \$1,060,838. By the time that the college requests came up for consideration by those responsible for the state budget, it had become increasingly apparent that the condition of the general state finances called for measures of economy, and it was accordingly requested of the College that no requests for salary increases be pressed. The College willingly acquiesced in this view, though under the rigid form of budget now adhered to some injustices resulted from the inability of the College to effect minor readjustments.

Among the maintenance items there was a decrease of 10 per cent. in travel, common throughout the state budget, and increases of \$1,000 and \$2,200 in equipment and supplies and in communication, respectively. Provision was made also for an increase of \$500 for the payment of premiums on workmen's compensation insurance. The amount of \$1,000 was appropriated for repairs at the Long Island vegetable research farm, this being the first provision for repairs since the buildings were purchased ten years ago.

Included in the appropriation act, under the heading "Maintenance undistributed," are some fifteen projects, practically all in research, and in these a decrease of \$8,190 (7.5 per cent.) was made. A decrease of \$16,000 (16.6 per cent.) is indicated in the special appropriation for the land survey and classification.

Two new projects were provided for in the appropriation, each in the amount of \$10,000. One of these items provides maintenance for additional livestock experimentation to be conducted by the Department of Animal Husbandry. In the years immediately preceding, provision had been made for the construction of barns and for the purchase of additional livestock, and the new funds are to be applied to the feeding and care of the animals just purchased and for the active conduct of the experiments. The other new appropriation is for extension work in agricultural economics and farm management. The critical conditions existing have driven farmers as individuals and as organized groups to demand help from the College, more than ever before, in the readjustment of their enterprises, and the appropriation was requested to enable the College to bring the results of its research to bear upon these urgent needs. The amount appropriated will allow a beginning to be made in this direction.

The appropriations of the preceding years have provided for a new building for the Departments of Agricultural Economics and Farm Management, and Rural Social Organization, and request was made this year for adequate equipment for this building. The amount of \$150,000 was appropriated for this purpose, and it will doubtless be necessary to increase this amount in later years.

In addition to the items mentioned, provision was made in the amount of \$11,666 for covering part or all of the deficiencies resulting from emergency repairs, workmen's compensation, and instruction furnished by Cornell University.

In view of the existing conditions, the College received very generous consideration by the Governor and the Legislature in being allowed to continue its work with no drastic curtailment in 1932-33. It is hoped that the direct remedial

service rendered by the institution to the agricultural industries of the State will justify this consideration.

The necessity of retrenchment reveals perhaps more clearly than otherwise the difficulties resulting from the rigid and finely itemized appropriations under which the College, in common with other state agencies, must operate. This situation is made still more trying, when, as happened this year, salary appropriations are decreased by the amount of unused balances which happen to be indicated at the moment when the budget requests are written. In one department of the College the death of a staff member resulted in appointments being made at less than the salaries available—avowedly temporary arrangements until a more permanent reorganization could be effected. Cutting off in the new budget the balances temporarily not used in the old, reduced four major positions, and the department is more or less permanently crippled.

Vacancies resulting from death or from the resignation of staff members frequently give opportunity for a reorganization and a realignment of effort within a department, but the form of the state budget forces the College to continue without reforming its lines, and, unless vacancies are instantly filled at full salaries and in their old form, the work is likely to be permanently curtailed. Good and economical administration is thus punished rather than rewarded. While the extent to which that has taken place may not be large, the issue certainly deserves consideration. If further reductions in appropriations are found to be necessary, they should be accompanied by a large measure of budgetary freedom.

THE FEDERAL APPROPRIATIONS

The federal appropriations, mostly for research and extension, are continued in the amount of \$288,532. The additional amount to be received for teacher training under the Smith-Hughes Act cannot be exactly stated, since it comes, not as direct appropriation, but as reimbursement after the services have been rendered. In previous years the amount thus received has been about \$27,500, but a reduction of 10 per cent. has been indicated for 1932-33.

UNEMPLOYMENT EMERGENCY RELIEF FUNDS

The College participated as one of the agencies of the State through which the temporary emergency relief administration made available work for the unemployed. Two grants, one of \$25,000 and one of \$15,000, were received by the University for the use of the State Colleges, and these grants made possible a series of improvements that were greatly needed. Necessarily the work had to be largely of an unskilled kind, but there is no scarcity of this in connection with the college plant. Aside from painting and repairs in the state buildings and greenhouses, the main projects thus far entered upon are the partial cutting-down of the ground obscuring the view of Fernow Hall from Tower Road, the draining of the area surrounding the Poultry Building, the construction of a series of experimental fish ponds, the building of roads through the poultry farm, the improvement of roads around the barns and in various other places, the lowering of water mains exposed by grading around the Plant Science Building, the reconditioning of cement work, particularly around Bailey Hall, the cleaning-up of a part of the herbarium, and many minor items of similar character. The university organization is well suited to taking on this additional labor, and the results show that the work was effectively and economically done.

BUILDING AND GROUNDS

The present financial and industrial situation has permitted the College to do exceedingly well with the funds appropriated in 1930 for barns and other animal-husbandry equipment. Some of these items were referred to in the report for 1930-31. The new sheep barn, with installation of water system and drainage, fencing of pastures and paddocks, and construction of roads, was obtained for \$21,218. The cost of the swine barn, with similar facilities, was about \$26,000. The beef-cattle barn was constructed for \$24,354. In addition, numerous improvements have been made on the old barns and a water system was installed on

the newly purchased Warren farm. All of this work was done in a most satisfactory manner and the results give evidence of the careful planning of the department concerned. The purchase of stock, for which a special appropriation was made in 1931, has been completed, the barns are in use, and experimental work is under way.

The construction of the concrete road leading from Tower Road through Garden Avenue and surrounding Bailey Hall except along its northern side, extending also in front of Roberts Hall and the Plant Science Building, has greatly improved both the appearance and the convenience of these areas of the campus.

The building for the Departments of Agricultural Economics and Farm Management, and Rural Social Organization, for which the foundation had been built on an earlier appropriation, was begun during the year and satisfactory progress is being made. The building should be ready for occupancy in the latter part of the coming college year, if not by the second term. The cornerstone of the building was laid on May 23, 1932, with short addresses by President Farrand, Provost Mann, Acting Dean Betten, Director Ladd, and Professors Warren and Sanderson.

THE PLANT SCIENCE BUILDING FULFILLS EXPECTATIONS

The Plant Science Building went into use with the beginning of the second term of 1930-31, and the intervening year-and-a-half has served to prove the satisfactory character of the building and of its equipment. All of the departments occupying the building report enthusiastically upon the more effective work now possible. There are still to be built two underground rooms for experimental work in pomology and in plant physiology, and one unfinished room is to be fitted up for X-ray experimentation of plants. It is hoped that these additions may be completed during 1932-33. The main classrooms of the building proved to be very unsatisfactory because of their acoustic properties. The main lecture room has been brought to a satisfactory state and two other rooms are to be similarly treated. It would be highly desirable if other areas of the building might be improved in this respect.

SPECIAL GIFTS AND TEMPORARY GRANTS

A tripartite agreement between Finch, Pruyn, & Company, the Forest Service of the United States Department of Agriculture, and Cornell University, provides that the company is to transfer to the University a tract in Hamilton and Essex Counties. This tract comprises 623.838 acres and contains 2260 cords of spruce and fir pulpwood to be retained by the company with such exceptions for experimental cutting as may be agreed upon. The area is to be used for research and experimentation by the three parties to the agreement. The building erected by the company in 1927 for the use of the student summer camp is situated in this area.

The Alpha Zeta fraternity gave witness of its interest in scholastic achievement by offering a prize cup to be awarded to the male student making the best record during the freshman year. Presentation of the cup is made at one of the meetings of the freshman orientation class in October.

It is a pleasure to record the gift of 5,000 specimens of Lepidoptera, presented to the entomological museum by Bolton K. Smith, a former student in the College.

Acknowledgment is likewise made of the generosity of the New York State Bankers Association in its gift of \$2,000 for the purchase of emblems for girls and boys completing projects in the 4-H Clubs of the State.

The following agreements covering special temporary provision for research were executed during the year:

The Sylvania Industrial Corporation made available on July 1, 1931, the sum of \$2,000 to support a fellowship for the study of cellulose in the diet of higher animals, especially in its effect on the digestion and absorption of nutrients and on the proper functioning of the intestine in the excretion of waste products.

The Niagara Sprayer and Chemical Company entered into an agreement to furnish \$1,500 a year for two years, beginning on October 1, 1931, for the investigation of the efficiency of the materials developed for use as fungicides and also of the methods of testing such materials.

The Niagara Sprayer and Chemical Company also renewed its support of a fellowship for the investigation of the factors involved in the application of dusts for the control of diseases and pests of orchard and other crops. The fellowship is extended for two years from April 1, 1932, and the company supplies \$1,750 a year for its support.

The Uhlmann Grain Company provided \$1,200 to support the study, during the year beginning on October 1, 1931, of the various services involved in the handling of grain and of the cost of these services in both the domestic and export phases of the business.

The American Cyanamid Company agreed to furnish, for the period from March 1, 1932, to June 30, 1934, the sum of \$4,000 for a study to determine the feeding value for dairy cows of timothy hay cut at an early stage of maturity and from land well fertilized, especially with nitrogen, as compared with legume hay.

The Genesee-Orleans Vegetable Growers' Cooperative Association renewed its grant for a fellowship for the investigation and demonstration of the nature and control of the diseases and pests attacking the muck crops grown by members of the association. The fellowship is extended for two years beginning on April 1, 1932, and the stipend is \$1,200 a year.

COOPERATION WITH GOVERNMENTAL AGENCIES

Aside from the routine and established connections with state and federal agencies, every year sees special or new forms of cooperation under way, and the College welcomes the opportunity to extend its services through these means.

The United States Department of Agriculture urgently requested the University to release for special service in its employ Extension Assistant Professor Lawrence M. Vaughan, of the Department of Agricultural Economics and Farm Management, and leave of absence without salary was given during April, May, and June. A well-equipped substitute for Professor Vaughan for this period was found in Paul S. Williamson, who has had seven years of experience in extension work at the University of California.

Professor Clyde B. Moore, of the Department of Rural Education, was released for two weeks at the request of the State Department of Education to aid in a study of the schools of New York City conducted by that department. Professor Paul J. Kruse participated in a series of regional conferences for district superintendents, conducted by the State Department of Education, and Professor Rolland M. Stewart made a study of the teaching program at the State Institute of Applied Agriculture at Farmingdale, Long Island. Professor Emory N. Ferriss has served as a member of the staff making a survey of secondary schools under the direction of the United States Office of Education.

Professor Ralph S. Hosmer has served on Technical Committee No. 5—forests, parks, recreation, and wild-life-preservation areas—of the National Land-Use Planning Committee of the United States Department of Agriculture. Professor A. Bernard Recknagel has cooperated with the United States Timber Conservation Board and is a member of the Advisory Committee of the United States Department of Agriculture on a survey of non-utilized wood in New York State.

The commission appointed by the State Legislature, with Senator Perley A. Pitcher as chairman, to study the milk situation in New York State, requested the services of Professor Leland Spencer, of the Department of Agricultural Economics and Farm Management, and Professor Spencer has been given leave without salary during the first term of 1932-33.

Agreement has been reached with the federal Bureau of Fisheries and the New York State Conservation Department regarding the prosecution of research at the federal fish hatchery located near Cortland, New York. The station is a small one, and the plan is to devote it exclusively to investigations in the physiology, particularly the nutrition, of fishes. The federal Bureau will furnish all the facilities of the station, including stocks of eggs and food for the fishes. The State Conservation Department will furnish a laboratory technician, and funds for chemical and special equipment needed. The College of Agriculture will contribute the services of Dr. Clive M. McCay, of the Department of Animal Husbandry, for planning and directing the experimentation. Dr. McCay's service will

be largely incidental during the academic year, but he will give one or two months of full time in the summer, when he will be employed by the State Conservation Department.

Late in April the state temporary emergency relief administration called upon the College for aid in organizing vegetable gardens for the unemployed. Part-time of two extension members of the Department of Vegetable Crops was allotted to this project for about a month, and the relief administration furnished an additional man for six months to work under the direction of the college department. Detailed plans were prepared covering the value of such projects, their organization and supervision, the selection of land, the kinds and varieties of vegetables to be grown, dates of plantings, spacing, detailed planting plans for gardens of four sizes—250, 500, 2,000, and 5,000 square feet—and the quantities of seeds needed. Committees in thirty-six cities were helped with this project during the month of May, and in three more during the first days of June.

This project was started too late in the season to be most effective. There was no time to create interest and to work out plans for efficiently handling a large new undertaking of this kind. Even where local interest had been shown, the land in most cases had to be selected and prepared late. In some cases the land was selected without regard to its adaptation to gardening or to its productivity. All kinds of ventures in the growing of vegetables were under consideration in addition to home gardening. Some of these had already created antagonism on the part of local vegetable growers and other local people. The workers were able to get some of these changed, but a few will be carried through on other than the individual family-subsistence-garden plan. Most local vegetable growers have appreciated the condition of the families reached by this project, and some have given valuable help on the local committees; only a few have opposed the project as injuring their business.

THE RELATIVE EMPHASIS ON TEACHING, EXTENSION, AND RESEARCH

The College of Agriculture derives its support from many sources and performs many different kinds of services, and an adequate analysis of expenditures is made extremely difficult because the same individuals and the same equipment may be used for a variety of these functions. There are courses of instruction of varying lengths, instruction of graduate students, extension work throughout the State, research projects of many kinds, public services of a great variety supported by a score of different public funds and to a minor degree by private funds—all carried on and administered by the college staff. Almost every instructor on the staff, every laborer on the farm, almost every piece of apparatus purchased, contributes to teaching, to extension, and to research, but the determination of the proportion in which they contribute to the multifarious end-products of service is a matter of hazardous guesswork.

It is nevertheless important to know what the different services cost even if only approximate answers can be obtained. A study of the expenditures of 1930-31 shows that the energies of the institution, as measured by financial outlay, go into teaching, extension, and research to the extent of 38.8, and 30.6, and 30.6 per cent., respectively. The several departments vary considerably in the distribution of their work, some of them being devoted almost wholly to teaching, others to research. Counting all classes there were 814 individuals employed in the academic and operating staffs in the year, many of them for very short periods or for part-time only, so that the 814 would be reduced to 639.7 persons on a full-time basis. The full-time man equivalents devoted to teaching, extension, and research were 242.6, 164, and 233.1, respectively.

STUDENT ENROLLMENT

The enrollments of the past two years are as follows:

Students in the four year courses:	1930-31	1931-32
Freshmen.	277	299
Sophomores.	194	218
Juniors.	149	182
Seniors.	133	141
	753	840

Special students...	33	49
Students in the two years courses:		
Dairy Farming...	16	23
Fruit Farming...	9	16
Poultry Farming...	5	6
Vegetable Growing...	2	1
Marketing Fruits and Vegetables...	—	1
Commercial Floriculture...	3	8
Manufacturing and Marketing of Dairy Products	8	8
	43	63
Students in winter courses:	1930-31	1931-32
Agriculture (general)...	59	37
Dairy Industry...	34	37
Poultry Husbandry...	13	14
Fruit Growing...	5	14
Flower Growing...	13	18
Vegetable Crops...	7	6
Graduate Students...	—	387
Summer-school Students...	771	880
	2118	2445
Less number counted twice.	91	112
	2027	2333

ANALYSIS OF THE STUDENT BODY AS TO RESIDENCE AND AS TO FARM EXPERIENCE

Some interest attaches to the sources of the student body as to residence and as to farm experience. There is variation in both of these, and the causes are not always clearly indicated.

So far as geographical distribution is concerned, a decrease in the proportion of undergraduates coming from other States is probably to be expected with the increasing provisions made for agricultural education in those States. But the decrease is likely to be very marked in periods when financial stress forces students to seek their training where they can get it most cheaply, which is generally in their own States. The percentage of students registered from out of the State in a series of years is shown in the following tabulation. Graduate students are not included, and these are of much wider distribution. Nor are the two-years' special students included, who are practically all from New York State. For the years prior to 1925, students in home economics are included, and this tends to decrease the percentage of nonresidents in those years.

	<i>Percentage of nonresidents</i>		<i>Percentage of nonresidents</i>
1911-12.	11	1928-29.	17
1919-20.	23	1929-30.	17
1923-24.	16	1930-31.	15
1927-28.	16	1931-32.	12

THE EXPERIMENT STATION

As already indicated, the work of the experiment station now absorbs about one-third of the time of the staff and of the resources of the College. In addition, the work of nearly five hundred graduate students results in very significant contributions to the research program. For a detailed statement of the progress of these investigations reference is made to the annual report of the Station published by the State.

THE EXTENSION SERVICE

The nation-wide depression did not affect the agriculture of New York State with full force until late in 1931. Unfortunately, since the extension work is dependent largely upon local support, it is likely to be curtailed when it is most

needed. During 1931 membership in the farm bureaus was at the highest point of the preceding nine years. The unfavorable conditions ensuing, involving many bank failures in country districts, low prices for staple crops, and a great decline in the price of fluid milk, make it seem likely that the membership of the bureaus will be reduced and that the number of agents employed may be decreased. The extension service of the College is in very close touch with every change in the agricultural situation, it has the confidence of the farmers of the State and of the farm organizations, to such an extent that it is consulted on every change of policy that is considered. The extension forces are therefore under an unusual strain of responsibility and the end of the year finds them busy in reorganizing the program so as to meet the emergency conditions as well as possible.

CORNELIUS BETTEN,
Acting Dean of the New York State College of Agriculture
and Acting Director of the Experiment Station.

APPENDIX IX

REPORT OF THE NEW YORK STATE AGRICULTURAL EXPERIMENT STATION

To the President of the University:

SIR: I have the honor to submit the Annual Report of the New York State Agricultural Experiment Station at Geneva for the year 1931-32.

The present summary is directly derived from the detailed report of the Station prepared by Director U. P. Hedrick with the aid of the Station Staff and published by the State. The complete document is an interesting account of the work accomplished and constitutes a record that will be much consulted both by the farmers of the State and by research specialists in the fields in which the Station operates. Director Hedrick's report indicates a year of great accomplishment and it reflects the assurance of the still more effective service which the improved conditions at the Station will make possible.

THE STATE'S PROVISION FOR THE NEEDS OF THE STATION

In common with other State agencies, the Station readily concurred in the general program of asking for no salary increases for the year 1932-33. In addition, it was agreed to accept a reduction from \$110,450 to \$100,000 in the total appropriation for eleven important research projects carried by the Station. While, of course, this means some reduction of work along these lines there was some compensation in that the total to be devoted to these special purposes was appropriated as a lump sum.

THE NEW BUILDINGS

After many years of great need for it, the Horticultural building has become a reality. The long delay has at least had the good effect of giving the Station a better building and more adequate equipment than had been hoped for. The Legislature of 1930 made an appropriation of \$285,000 for the building which was completed in the early part of the winter of 1931. The subsequent appropriation for equipment was in the amount of \$65,000 and installation was completed in the winter of 1931-32. The building is now occupied by three divisions, Pomology, Botany, and Vegetable Crops, and the work in these fields can now be carried on under the best of conditions and new types of work long needed can be undertaken.

The removal of three divisions to the new building greatly relieved the congestion in all the Station laboratories and resulted in a number of shifts. An appropriation of \$15,000 made by the Legislature of 1931 is being spent in remodeling the old Biological building which is now to be used by the Bacteriological and Dairy Divisions only. The removal of the Division of Vegetable Crops left the Administration building free for use in its original purposes.

The Legislature of 1931 appropriated further the sum of \$80,000 for new greenhouses. Ever since 1914 the replacement of the antiquated greenhouse equipment has been urged and the accomplishment of this purpose will have a marked effect on the work of several important divisions of research.

All in all this is the first time in two decades that the Station workers can be said to be adequately housed and equipped. It is fortunate for the State that these essential services were provided before the possibility for them passed.

CHANGED EMPHASIS IN THE WORK OF THE STATION

The changed conditions affecting the farmers in whose interest the station operates have led to certain changes in the emphasis of the Station research. While the efforts to help farmers to produce good crops economically is continued, increased attention is given to converting farm products into new and improved forms that will stimulate their consumption. While workers at the Station have been dealing with farm by-products for some time, renewed efforts are now being made for the utilization of fruit, vegetable, and dairy by-products. More specifically, these studies pertain to the making of ice cream, cheese, and casein, sauerkraut, bottled cider, grape juice, pectin, jams, jellies, and preserves.

One of the most interesting of the new projects relates to the quick freezing of fruits and vegetables, work which the Station is doing in cooperation with the Birdseye Laboratories of the General Foods Corporation of Worcester, Massachusetts. From the Station's standpoint the several projects have in view the determination of what varieties of fruits and vegetables are best suited for freezing, what the chemical and bacteriological changes are in the frozen products, and in general how this process may be adapted to the preservation of foods.

THE STATION'S FIFTIETH ANNIVERSARY

The work of the New York State Agricultural Experiment Station began on March 1, 1882, and hope has been entertained that formal recognition might be taken of the fiftieth anniversary of that event. The financial situation made it impossible to request a State appropriation for this purpose. Instead the plan was adopted to have as many as possible of State and National organizations meet at the Station during 1932 and to take opportunity to present the history and work of the Station to these interested visitors. The plan has worked admirably and probably more people have thus been apprised of the work of the Station than would have been reached through a formal celebration.

LUCIUS LINCOLN VAN SLYKE

Dr. Lucius Lincoln Van Slyke, for thirty-eight years Professor of Chemistry, and Head of the Division of Chemistry, died at Geneva on September 30, 1931, having attained the age of seventy-two years. Dr. Van Slyke received his collegiate training at the University of Michigan, taking the doctor's degree there in 1882. From 1882 to 1885 he was instructor in Chemistry at the University of Michigan; from 1885 to 1888 Professor of Chemistry at Oahu College and Government Chemist at Honolulu, Hawaii; from 1888 to 1889 Lecturer in Chemistry at the University of Michigan; from 1889 to 1890 Fellow at Johns Hopkins; and from 1890 on he occupied his position at the Station. In the interim between the administrations of Dr. Peter Collier and Dr. W. H. Jordan, Dr. Van Slyke served as Acting Director.

Dr. Van Slyke's first contribution was in the chemical inspection of commercial fertilizers and of feeds offered for sale in the State. His vigorous and efficient discharge of this duty won the confidence of the farmers of the State and did much to crystalize farm sentiment in support of the Station. His fame as a scientist will, however, rest most largely upon his work in the field of Dairy Chemistry. The farmers of the State benefited greatly by his researches in the chemistry of milk and milk products, especially cheese, and scientific literature was enriched by his numerous contributions in the more technical aspects of these studies.

MORGAN P. SWEENEY

Another loss to the Station and its service came through the death of Morgan P. Sweeney on August 6, 1931. Mr. Sweeney came to the Station on June 1, 1909, and had therefore completed twenty-two years of service. On July 1, 1930 he became Associate in Research in Chemistry and since that date his time has been given to chemical studies for the Division of Pomology. His colleagues on the staff bear witness not only to the worth of his professional work but also to the fine personal qualities which endeared him to his associates.

RESIGNATIONS AND APPOINTMENTS

Appointments not previously reported include as Associates in Research in Chemistry, Harold G. Beattie and G. L. Mack, and as Assistants in Research, Alvin W. Hofer (Bacteriology), Mrs. Mabel Ruttle-Nebel (Botany), Ralph R. Jenkins (Vegetable Crops), E. Cooper Smith (Chemistry), A. W. Crawford (Entomology), J. A. Cox (Entomology), and O. H. Hammer (Entomology).

Mr. C. S. Pederson was promoted from Associate to Chief in Research, and Messrs. W. O. Enzie, W. F. Walsh, and J. C. Marquardt from Assistant to Associate in Research in their respective fields. Mrs. Rachel Hening became Assistant Editor on October 24, 1931.

Mr. E. L. Green resigned as Assistant in Research on November 15, 1931, and Mrs. Mabel Ruttle-Nebel and Mrs. Olive Hoeft Sipple as Assistants in Research on June 30, 1932.

COOPERATION OF THE STATIONS

It is a pleasure to record that, as always, the two Stations now under the administration of the University have cooperated to the fullest extent possible. During each year, besides numerous informal conferences, stated meetings are held of workers in each field in which duplication might occur and a unified program of research results.

CORNELIUS BETTEN,
Acting Dean and Acting Director
of Experiment Stations.

APPENDIX X

REPORT OF THE ACTING DEAN OF THE NEW YORK STATE COLLEGE OF HOME ECONOMICS

To the President of the University:

SIR: I have the honor to transmit the annual report of the New York State College of Home Economics for 1931-32.

The more detailed report submitted for publication by the State by the Director of the College and her associates, covering all of the activities of the departments, properly gives emphasis to the attempt that is made in the College to vitalize the educational program for the students through giving them active and responsible participation both in its planning and in its procedure. Recent years have seen in many American colleges a growing recognition of the fact that these institutions must fail in their central purpose unless in some way the processes of education grow out of the interests, the needs, and the activities of the students themselves. Efforts in this direction are sure to be somewhat vague and hesitant and should of course be regarded as experimental. But it is of the greatest importance that such undertakings be given encouragement, so that the possibilities may be fully developed and the results of experience shared. The University as a whole will do well to keep informed on this venture in progressive education in the College of Home Economics.

THE APPROPRIATIONS

The appropriations made by the Legislature for the year 1932-33 are virtually the same as those of the preceding year. No changes were made in personal service items except that the State took over a second third (\$10,000) of the support of the work in child guidance and parent education, originally sponsored by the Laura Spelman Rockefeller Memorial. The amounts made available for equipment and supplies, travel, and repairs, and for the summer school were reduced somewhat from the appropriations of the year before.

An appropriation of \$250,000 was made for the equipment of the new home economics building. This is a considerable reduction from the lowest estimates made of the needs of this very large building but it is recognized that the times admit of no more generous action and that the College must adjust itself to the existing situation.

The federal appropriations remain as for the preceding year except that a part-time salary of one instructor is affected by the 10 per cent. reduction in the Smith-Hughes fund.

TEACHING, EXTENSION, AND RESEARCH

To those familiar with only the older and traditional forms of college organization it is surprising to learn of the extent to which, in the fields of agriculture and home economics, the land grant colleges devote themselves to extension work among the citizens of the State, and to organized research. It is difficult, in the Colleges of Agriculture and Home Economics at Cornell University, to show very precisely the proportion of effort or of material resources that goes into the three major functions. This is because, to a considerable degree, the same persons and the same equipment serve these varied purposes. An attempt has been made to get an approximate answer to the question in both the College of Agriculture and the College of Home Economics, by estimating for each salary and for each expenditure the proportion in which these are contributory to teaching, extension, or research. On the basis of these numerous estimates it would appear that of the total expenditures in the College of Home Economics in 1930-31, 56.5 per cent. was for teaching, 37.8 per cent. for extension, and 5.7 per cent. for research.

THE STUDENT ENROLLMENT

As in previous years the College has been forced to exclude from enrollment many who had met the formal scholastic requirements. The number applying in the spring of 1932 is three times the number that can be accommodated. The College has therefore had to study the methods by which candidates should be selected and it is felt that progress has been made in what must at present be regarded as an unpleasant necessity. There are, to be sure, applicants who should not attempt work of college grade, but means should be provided for further training appropriate to the needs of all who are ready to undertake it.

The following table gives the enrollments of the College of Home Economics and of the Department of Hotel Administration.

	<i>Home Economics</i>		<i>Hotel Administration</i>	
	<i>1930-31</i>	<i>1931-32</i>	<i>1930-31</i>	<i>1931-32</i>
Freshmen	120	104	45	59
Sophomores	126	120	53	57
Juniors	75	113	45	48
Seniors	82	73	32	33
Total	403	410	175	197
Special students	10	9	1	—
Graduate students	30	31	4	4
Summer Session students	160	171	54	46
Total	603	621	234	247
Less number counted twice	20	26	2	4
Net total	583	595	232	243

THE STAFF OF THE COLLEGE

During the year 1930-31 the College of Home Economics (exclusive of the Department of Hotel Administration) employed a total of 122 individuals, many of them for part-time service. Reduced to a full-time basis these would be equivalent to 86 persons of whom 56 would constitute the academic and administrative staff. In the Department of Hotel Administration there were employed 22 persons, equivalent to 13 on a full-time basis, with the equivalent of 10 on the academic and administrative staff.

CHANGES IN THE FACULTY

The resignation of Dean A. R. Mann to become Provost of the University was followed by the temporary appointment of Dr. Cornelius Betten as Acting Dean beginning on August 1, 1931. At the close of the year the University Trustees filled the Deanship by the appointment of Dr. Carl E. Ladd, formerly Director of Extension.

Following the death of Director Martha Van Rensselaer on May 26, 1932, the Trustees appointed Dr. Flora Rose as Director of the College. Professor Mary F. Henry was appointed assistant to the director, and Dr. Ruby Green Smith was made state leader of home demonstration agents, all of these appointments to become effective on July 1, 1932. Dr. Helen Bull was advanced from assistant professor to professor of home economics (child hygiene) on September 24, 1931. Miss Katherine W. Harris was promoted from assistant professor to professor of home economics (institution management) to be effective on July 1, 1932.

In the Department of Hotel Administration, Mr. John Courtney was advanced to the rank of assistant professor (hotel accounting) on April 29, 1932.

Dr. Adelaide Spohn resigned her professorship in the Department of Foods and Nutrition on October 1, 1931. Mrs. Charlotte H. Merrell resigned as instructor and as assistant manager of the cafeteria on June 30, 1932.

MARTHA VAN RENSSELAER

Only rarely are institutions and persons so closely united in their history and development as were the College of Home Economics and its first Director, Martha Van Rensselaer. The earlier stages of the growth of the College belong in a peculiar sense to this notable figure in education. It was she who made the earliest beginnings in home economics education at Cornell University, first in extension work among the women of the State and later in resident instruction. Every step in the entire development of the institution as department, school, and college, was taken under her guidance, and every activity had to the day of her death her closest scrutiny. The memory of her personality and of her fruitful activities, and her ideals of home economics education which grew and clarified with the years, will be a lasting heritage for the College, as the College in turn, will ever be a great memorial of her devoted service.

CORNELIUS BETTEN,
Acting Dean of the New York State
College of Home Economics.

APPENDIX XI

REPORT OF THE DEAN OF THE COLLEGE OF ARCHITECTURE

To the President of the University:

SIR: I have the honor to submit the following report for the College of Architecture for the academic year 1931-32.

During the first term of this year, owing to the absence of the Dean, on leave, Professor Martin carried the administrative work of the College as Acting Dean. The extra burden so taken on was a considerable one. His careful and happy conduct of the matters left in his hands places the College once more and finally in his debt. His retirement at the end of this year is the occasion of sincere regret to each member of the Faculty and of concern as to the future of a most important phase of the work of the College.

The selection of Professor Martin's successor has been given very careful thought and I am glad to be able to report that largely due to Professor Martin's own cooperation we have been able to secure the services of John Neal Tilton, Jr., of Chicago. The son of an alumnus of this College; himself an alumnus of the class of 1913 and a popular and successful practitioner in Chicago, he brings a definite prestige to his work as well as great enthusiasm. He should be able to carry the work in applied construction to new levels of distinction at a time when the new materials and new methods that are coming into use emphasize the importance of this phase of the work as never before.

The number of students in the College, as forecast in last year's report, was slightly less than for the previous year, and about 10% less than for the average for 1927-30. This falling off is altogether in the second to fifth year classes; twenty-nine students from these classes being now on leave of absence, mostly due to lack of resources. There was no difficulty in filling the Freshman quota and there will be none for next year's class, though the number of applicants refused admission is again less than for the previous year. The total numbers for next year will probably show a further but not alarming decline. On the whole, and especially in view of the situation in some of the other schools of Architecture, I believe we can feel that our situation with respect to attendance is quite satisfactory.

While the College as a whole has been over-crowded for many years it is nevertheless true that in two departments, Landscape Architecture and Fine Arts, more students would be welcome even though this would necessitate a decrease in the department of Architecture.

In Landscape Architecture the number of students has remained about stationary for ten years. Ours is the only five-year course in Landscape Architecture in the country and that fact, coupled with a relatively high tuition charge, doubtless has prevented desired growth.

In Fine Arts the situation is somewhat the same though differing as to detail. It is felt that in both these departments a few undergraduate scholarships could be used to a very great advantage. As soon as it is feasible to do so, such scholarships should be offered.

While for the present undergraduate scholarships in these fields is the more pressing need, a limited number of graduate fellowships is essential to the full development of these departments.

Cooperation in the field of general instruction in the Fine Arts, with other colleges of the University, has advanced notably during the past year. Professor Bosworth has offered two courses in the Theory of Design, one for students in Engineering and one for students in Arts and Sciences. These courses have been well received and the attendance and interest shown have demonstrated that a need for this sort of instruction does exist.

Registration in the elementary courses in the History of Art has reached the practicable limit; the advanced courses are filling up well and it can now be said

that this work has proved its worth, has passed the experimental stage and is definitely established, though on a restricted basis.

For the past three years the Colleges of Engineering and Architecture have jointly sponsored a course of lectures on City and Regional Planning. These lectures have shown that there is, in the student body, an eager and sustained interest in these subjects. As is usual in such cases, this student interest is a reflex of activities peculiar to our times. This course of lectures has been an interesting demonstration of interaction between a developing field of thought and action and the Universities. The cooperation of many individuals and such civic bodies as the Westchester County Park Commission, the Port of New York Authority, and the Committee on Regional Plan of New York and its Environs has been given in a most generous and effective manner. These organizations in turn are looking to the schools not only as recruiting grounds for workers in their fields but also as places where an understanding of the great and vital program on which they are engaged may be built up surely if slowly.

From time to time there has been the suggestion that Cornell should enter the field of City and Regional Planning on a professional basis but as our experience develops it is becoming obvious that this would be unwise. There is however a definite desire to carry this work further than is possible in a series of lectures given by outside experts. It is felt that as soon as it can be done there should be added to the Faculty some person who has a definite standing in the general field of large scale planning and public properties. While the work in this field would appeal primarily to students of Engineering and Architecture, it is now definitely known that there are those in Arts and Sciences and perhaps elsewhere who would quickly avail themselves of such an opportunity.

The exhibitions in the Morse Hall Galleries have been continued this year on College funds. This has necessitated a very much restricted program. The loss of continuity has resulted in a much smaller attendance and there is some question as to whether the results have justified the expenditure of time and money involved. For the present the question is a purely academic one as no funds whatever are in sight for next year. However, our experience has led to several important conclusions. (1) When properly conducted, exhibitions such as we have had do serve a very real need of the University Community. (2) A continuous and well developed policy is necessary to insure results. (3) In order to frame a policy and conduct the exhibitions some one must devote a large share of his time to it and therefore must be relieved of a part of his teaching schedule. (4) As soon as it is possible to do so, these exhibitions should be resumed and put on a permanent basis. This will require upwards of \$2,500 a year.

So far the bulk of this report has been a recitation of details dealing not so much with the internal and technical work of the College as with its outside relations. This reflects accurately the problems which, at the moment, are receiving most attention! While it might seem that there is no broad plan back of these excursions into the general field of the Fine Arts, there is really more coordination than appears on the surface. Experiments are also going forward in the College of Arts and Sciences that are not without relation to our own, and a tentative plan exists for supplementing and coordinating these developments as and when financial support can be found. It has seemed wise to go ahead with individual projects when they have seemed feasible rather than to do nothing while awaiting the support that would insure a full development of Fine Arts instruction on a broader basis. Meanwhile the internal and technical work of the College is going forward in a satisfactory manner. The quality and devotion of the members of the staff are at a high level and insure the future of this phase of our work.

GEORGE YOUNG, JR.,

Dean of the College of Architecture.

APPENDIX XII

REPORT OF THE DEAN OF THE COLLEGE OF ENGINEERING

To the President of the University:

SIR: I have the honor to submit the following report upon the College of Engineering for the year 1931-32.

The number of students registered in the College for the academic year just closed was 1936, or 36 more than the preceding year. The depression so far has not affected the total attendance, but there are many indications of great financial distress among the students, particularly among the upperclass men. This is as should be expected, though comparatively few have been compelled to withdraw because of lack of funds. No doubt this number would have been greater except for the many scholarships and loan funds now available for needy students. The advance registration for freshmen for next year is fully up to normal, but no doubt we may expect a decrease in registration among those now in college. How far this may be counterbalanced by the return of men now absent is, of course, problematic.

In this connection the growth of the McMullen Fund is noteworthy, the invested capital being now over \$500,000 and growing steadily. This fund promises to be the most helpful bequest that has so far been made in the interests of the students of the University. As the amount to be distributed has increased, greater care has been exercised in its administration. At present, each of the three schools of the college has a committee on scholarships so that the awards are made by men familiar with the work and character of applicants.

The most important educational development of the year was the actual offering of the course in Administrative Engineering leading to the degree of Bachelor of Science in Administrative Engineering. Since the freshman year is common to all students in the college, this course begins really in the sophomore year and about 50 men of this class have registered for the course. This of itself would indicate the need of this new curriculum.

The industrial depression through which we are now passing will, no doubt, lead to many new evolutions of industrial relations. There are many indications that the pioneer days of engineering and mass production methods are drawing to an end and it may well be that engineering education may have to be adjusted to suit new and changed industrial conditions. For the time being thousands of engineers, like so many other professional men, are out of work and the outlook for young graduate engineers is not a bright one. It may be that engineering education should be directed, so far as the majority of students is concerned, along somewhat broader lines than has been the usual practice up to the present. At any rate, engineering faculties should be alive to changing conditions as never before.

Since I last reported upon publications, a number of important books have been issued by faculty members as follows: *Experimental Mechanical Engineering* by Professor Diederichs; *Heat-Power Engineering* by Professors Barnard and Ellenwood; *General Engineering Handbook* by Professor O'Rourke; *Kinematics of Machinery* by Professors Albert and Rogers; *Materials Handling* by Professor Koshkin; and *Electrical Circuit Analysis* by Professor Malti. These books are worthy additions to the long list of texts produced by the Engineering Faculty that have done much to add to the reputation of the University.

Through the efforts of the Faculty of Civil Engineering a Local Section of the American Society of Civil Engineers has been established in this territory. While all members of the Society in this region are eligible to membership in the section, the activities of the group will naturally center in the Faculty of Civil Engineering and this should be a great stimulus to the work of the school. A similar section of the American Institute of Electrical Engineers has existed here for a number of years with helpful effect.

During the year considerable attention has been given by the Faculty to the graduate work of the college in an effort to raise the standard of this work and to reorganize the relations with the Graduate School so as to establish more effective control and guidance of graduate study. This has already resulted in helpful discussions among those interested in graduate study and should bring about needed changes in the entire structure of the Graduate School. This agitation is not confined to Cornell University. A committee of professors representative of a large number of engineering colleges in this country has been making a study of this problem for some time and will report at the June meeting of the Society for the Promotion of Engineering Education recommending procedure somewhat like that now under discussion here. The most important recommendation will be that those groups responsible for undergraduate degrees be entrusted with greater responsibility for the corresponding professional master's degrees, the Graduate School as a whole supervising the more advanced degrees and guiding, in a general way only, the work leading to the master's degrees. There is an obvious need for constructive work in this field.

The following research projects have been under way during the year under the direction of Professor Scofield.

Fatigue of Plain Concrete as Affected by Type of Aggregate.

Effect of Freezing before Setting on Strength and other Properties of Concrete.

Effect of Clay as an Admixture on Properties of Concrete.

Effect of Repetitive Loads on Bond of Steel in Concrete.

The third item of the series was performed for Colonel Hugh Cooper who furnished funds for the experiments. The following research projects have been directed by Professor Diederichs.

Research on Chimney Draft by Mr. J. R. Moynihan.

Research on Gas Calorimeters by Mr. R. W. Keith.

Research on Gas Furnaces by Mr. E. H. Carruthers.

Research on Pressure on Bearings by Mr. Jacob Yavitch.

Professor Upton has directed research on the properties of brake linings, Professor Lincoln is conducting important investigations on Thermal Metering of Electric Current, and Professor Karapetoff is continuing his experiments for the Detroit Edison Company upon the insulation of large electrical cables. In addition to these major projects there are a number of minor researches under way.

Last spring the placement bureau was fairly successful in placing the graduating class in industry despite the prevailing depression. It is experiencing much greater difficulty this spring though every effort is being made in this direction. This problem of placement must be given even more attention in the future, not only for this college, but for the University as a whole. Plans are now under way to extend the methods developed by Professor Bangs to include the entire student body in cooperation with alumni efforts. This would appear to be necessary even in good times and markedly so in times such as these.

It is unnecessary and useless to mention the many needs of the College with which you are familiar. The campaign for new buildings and endowment is temporarily held in abeyance pending better industrial conditions. With the return of prosperity, these plans will be prosecuted with vigor.

The work of the faculty has been of the usual high order and there have been no untoward incidents to mar the work of the college. The spirit of the faculty has been excellent and the work of instruction fully up to the usual high standard.

DEXTER S. KIMBALL,
Dean of the College of Engineering.

APPENDIX XIII

REPORT OF THE DIRECTOR OF THE
GRADUATE SCHOOL OF EDUCATION

To the President of the University:

SIR: I have the honor to present the report of the Director of the Graduate School of Education for the year 1931-32.

THE PROFESSIONAL TRAINING OF TEACHERS AT CORNELL

In this, the first report of the Graduate School of Education, it is proper to present a brief statement regarding the development of the work for the professional training of teachers in this institution.

This work was initiated through the activities of Professor C. S. Williams in the College of Arts and Sciences. Since then, two men, with their colleagues, have been responsible for the work in that College. Dr. Charles DeGarmo served the University from 1898-1914. Dr. R. M. Ogden began his services in 1916. In the College of Agriculture, the Department of Rural Education was planned in 1913 by Dean Liberty Hyde Bailey and organized by Professor G. A. Works in 1914. He supplemented the contributions of Mrs. Anna B. Comstock and Miss Alice G. McCloskey in rural education and nature study by offering courses in the teaching of Agriculture.

At least three attempts preceding the organization of the Graduate School of Education have been made to establish a University organization for the professional training of school officers.

1. In his report for 1894-95, President Schurman outlined a plan for a School of Pedagogy (according to the accepted terminology of that day) "analogous to the School of Law as now organized." This school was intended primarily for the training of secondary teachers and superintendents, and was to emphasize courses not available in the normal schools. It appears to have been President Schurman's plan that this school would be supported largely by state funds, and the following year State Superintendent Skinner recommended to the legislature that such a school be established. The matter was not pressed, however.

2. On June 1, 1907, the trustees authorized the establishment of a University School of Education and appointed as Director Dr. A. Ross Hill, then Dean of the College of Arts and Sciences. The Announcement that Dean Hill was authorized to prepare was never published, though it is still on file in manuscript form. Dr. Hill soon left Cornell to accept the presidency of the University of Missouri, so the completion of the organization was left in the hands of Dr. George P. Bristol. The President's reports for the five-year period 1910-1911 to 1914-1915 contain statements by Dr. Bristol as Director of the School. So far as can be determined from the evidence at hand this School did not function as an independent unit, but was merely the means of coordinating the professional work for teachers in the College of Arts and Sciences.

3. After Professor DeGarmo retired in 1914, the School of Education was apparently discontinued, the professional activities of the University in this field being carried on through the Department of Education in the College of Arts and Sciences and the Department of Rural Education in the College of Agriculture. During the next decade both departments continued to grow to such an extent that there was an overlapping of functions in several particulars. To provide for a closer coordination of work in this field, the University Trustees, in 1926, upon recommendation of the University Faculty, approved the establishment of a University Division of Education. This action did not combine the two departments, but did provide an organization looking toward a fuller coordination of their efforts. Each department maintained its autonomy and continued to perform such functions as were of primary concern to its college. The Division of Education operated under a fairly definite statement of functions as recorded in the minutes of the University Faculty for 1925-26.

Much good was accomplished through the Division, particularly in the way of bringing about a better understanding between the departments. It did not take many years of experience, however, to demonstrate the fact that, if Cornell was to develop its work in Education on a basis comparable with that of other major universities, a different type of organization was essential. Accordingly, the Trustees created the Graduate School of Education in April, 1931.

THE ORGANIZATION AND THE FUNCTIONS OF THE SCHOOL

Cornell does not have an independent organization for the training of undergraduates for teaching. This work is done through the colleges of Arts and Sciences, Agriculture, and Home Economics. While each Department of Education is responsible to its college so far as its work with undergraduates is concerned, the Faculty of the Graduate School of Education, which includes all persons in the field of professional Education, has considerable influence in determining the standards and the curricula for those seeking a first degree.

The School was designated as a Graduate School primarily because it was believed that the type of student that may best be served by such an institution as Cornell will, in a relatively short time, be trained largely on the graduate level. Unification in administrative policy is sought by having the Director of the Graduate School of Education serve also as head of each of the two college departments.

Not only for the reasons enumerated above, but because the income of one department comes from endowment funds, while the income of the other comes from state and federal funds, it is evident that the organization for the training of teachers at Cornell is more complicated than that found in the typical university.

The major functions of this organization may be briefly stated as follows: (1) The offering of certain Education courses for students, especially those on the undergraduate level, who are interested in this subject for its cultural value; (2) the offering of those courses to undergraduates that will enable them to qualify for secondary school teaching; (3) the training of various types of school officers on the graduate level.

Particular attention is now being given to training on the graduate level the following officers: secondary school teachers who wish to be particularly well qualified for their work; principals; superintendents; supervisors; and teachers of the various phases of Education in normal schools and colleges. Through the Department of Rural Education particular attention is given to the needs of the schools in the smaller communities. In the rural education courses now offered emphasis is placed upon the training of teachers, supervisors and directors of Agricultural Education, teachers and supervisors of Home Economics Education, village, district and county superintendents, extension workers in Agriculture and Home Making, and instructors of Rural Education in our higher educational institutions.

Activities will naturally be expanded as the growing needs of our schools make demands upon us, and as our facilities to meet those demands increase.

ENROLLMENT*

During the regular school year 542 undergraduates took courses in Education. Of these 177 were men and 365 were women. Two hundred and ninety-five were registered in the Department of Education and 247 were registered in the Department of Rural Education. Further details are given in the following table:

NUMBER OF DIFFERENT UNDERGRADUATES TAKING
COURSES IN EDUCATION, 1931-1932

	<i>Registered in Rural Education</i>	<i>Registered in Education</i>	<i>Total</i>
Senior standing			179
Men.....	35	22	57
Women....	53	69	122

*None of these figures include the summer session enrollment.

Junior standing			255
Men.....	45	46	91
Women.....	91	73	164
Sophomore standing			108
Men.....	5	24	29
Women.....	18	61	79
Total	247	295	542
Men....	85	92	177
Women.....	162	203	365

One hundred and eight different graduate students have taken either major or minor work in Education during the year. Of these, 65 majored in Education or in Rural Education while 43 had a minor only in these fields. Of the 40 students who were candidates for the Doctor's degree, 28 majored in either Education or Rural Education. Of the total, 71 took their major or their minor work in Rural Education. The accompanying table gives other interesting facts regarding these graduate students.

DATA REGARDING GRADUATE STUDENTS IN EDUCATION, 1931-32

I. Number of different students registered:	<i>First term</i>	<i>Second term</i>	<i>Both terms</i>
a. With Education* as a major.....	50	62	65
b. With Education* as a minor only.....	32	30	43
c. Total.....	82	92	108
II. Number who are candidates for:			
a. Ph.D. (major in Education*).....	22	26	28
b. Ph.D. (minor only in Education*)....	8	9	12
c. M.A. or M.S.....	37	41	49
d. M.A. in Education or M.S. in Education...	12	12	14
e. No degree.....	3	3	5
III. Geographical distribution:			
a. Number of different states represented.....	18	19	21
b. Number of different foreign countries represented	7	7	8
c. Number from New York State.....	44	48	59

*Education or Rural Education.

THE TRAINING OF SECONDARY SCHOOL TEACHERS

In the training of secondary school teachers there are three needs that should not be neglected: (1) The development of a background that will enable the teacher to exert a desirable cultural influence in the schoolroom and in the community; (2) the acquisition of an intensive knowledge of the subject matter to be taught, together with an extensive knowledge of related fields; (3) the learning of specific professional subjects that will bring an understanding of present-day ideals in teaching, will give information regarding educational history and the methods of teaching the various high school subjects, and will develop those skills that enable a teacher to do satisfactory work in the classroom. Most people would probably agree that the teacher cannot be well trained without a reasonably well-balanced program of study in which all three needs are satisfied.

In order to promote a better understanding on the part of those who teach subject-matter and those who are responsible for the professional aspects of teacher training, several conferences have been held during the year. These conferences have contributed to a fuller understanding of the requirements made by secondary schools upon their teachers. One of the immediate results is likely to be an increased interest in advising the undergraduate student to the end that, by the time his college work is completed, he will have gained a thorough grasp of the subject matter he is to teach. It is expected that similar conferences will be held from time to time as other problems arise.

The enrollment figures given above indicate that 542 students have taken courses in Education during the past year. This does not mean that 542 students are planning to enter upon the profession of teaching in secondary schools. A number of these students are undoubtedly taking courses in Education for their cultural value. Especially is this true of the courses in Educational Psychology and in the Principles and the History of Education. Not even the 179 seniors are planning to enter the teaching profession this coming year. Some of these graduates are meeting the state standards for certification in order that they may be prepared, if occasion should arise, to secure a teaching position. Probably the best indication we have as to the number who are hoping to become teachers at once is in the number of seniors registered in the Bureau of Educational Service. This year the number was 132, of which 34 were in Home Economics, 16 in Agriculture, and 82 in the other academic subjects.

It is commonly known that, during the last two or three years, a large number of persons preparing to teach in secondary as well as in elementary schools, have been unable to secure positions. Unless the various teacher-training institutions of the country reduce their output we shall soon have chaos in the profession. Already in some states teachers are beginning to bid against each other to such an extent that reasonable salary schedules are jeopardized. Should the compensation of teachers reach an abnormally low level, we may expect the number entering the profession to decrease. Although an oversupply will, in time, be its own corrective, such a policy of reducing teachers' salaries tends to introduce elements of an undesirable sort. Whether Cornell is training more teachers than it should is not now known. During the coming year we expect to give consideration to this matter. If it seems that the number of persons who enter the profession from this institution should be decreased, an attempt will be made to set up standards that will aid in selecting those students most likely to be successful in teaching.

If salaries can be kept at somewhere near their present level, the most hopeful method of reducing the oversupply of teachers appears to be the addition of a fifth year of training. That such a period of training for secondary school teachers is desirable if the three needs in teacher preparation are to be adequately met is admitted by anyone familiar with the profession. During the past year our staff has been giving serious consideration to this matter, and, for the first time, our 1932-33 Announcement urges those looking forward to secondary school teaching to plan for a fifth year. As this policy is adopted we shall be able to shift to the fifth year much of the strictly professional work of teacher training, leaving for the first four years and for a part of the fifth, additional time for general and specific training in subject matter.

Under certain conditions a person taking this fifth year will be able to secure either a regular Master's degree or one of our special Master's degrees in Education; but further consideration must be given to this matter before we can feel that the various problems created by the fifth year have been met.

It appears, at the present time, that certain changes are likely to be made by the State Department of Education that will have a considerable effect upon the training of the secondary school teacher in this state. While nothing has yet been decided, the preliminary discussions indicate that, without increasing the total number of hours of professional subjects required for a permanent certificate greater flexibility in the administration of this requirement will make it possible to meet the needs of various types of teachers more adequately than at present.

The principle proposed for this purpose is that there shall be a "core" of subject matter representing the minimum essentials in the training of the secondary school teacher. This "core" would include perhaps nine or ten semester hours. The remaining eight or nine hours could then be selected by the institution or the student to meet the special problems that must be faced by such different groups as those going into Home Making, into English, into Administration, and the like.

A second important modification will be the probable introduction of a practice-teaching requirement. That such a requirement is warranted can hardly be refuted. Practice teaching is to teacher training what the laboratory is to work in science. At the present time facilities to meet the proposed requirement are offered in Agriculture at the Trumansburg Central Rural School. They are met

in Home Making at Trumansburg and at Groton. The coming year will see an expansion of practice teaching facilities in Home Making through cooperation with the Ithaca Public Schools in the new Junior High School. The Ithaca Board of Education and Cornell University jointly maintain a teacher in English who has direct responsibility for the practice teaching in that subject. In lieu of the same facilities in other academic fields, arrangements have been made with the Ithaca High School to offer limited practice facilities to some twenty other students.

THE NEW DEGREES IN EDUCATION

Two years ago the degrees of Master of Arts in Education and Master of Science in Education were authorized. These were intended to meet a situation that is especially significant in the training of teachers, namely, making possible a program of greater breadth than is customary where the program is confined to a major and a minor subject. For example, a teacher of science in a secondary school, unless he happens to be in a large school, must be able to teach practically all of the different sciences. In planning a program leading to the Master's degree, he selects his major in one science and his minor in another. But what he actually needs is advanced work in several of the sciences, and this sort of program embracing more than two subjects the special degrees in Education make possible.

Another innovation in these degrees is that the thesis has been made optional. That the teacher needs to know how to use scientific method in attacking the many professional problems to be faced in the school, can hardly be disputed. The question is whether some other type of activity—such as seminar work, practical field work, etc.—can be made an adequate substitute for the thesis. Judgments on this vary, not only in our own group, but in the profession as a whole.

Since there are no traditions regarding these new degrees, such as exist in connection with the regular Master's degrees, numerous problems have arisen in their administration. The Faculty of the Graduate School of Education has been wrestling with these matters from time to time in an effort to establish standards that will insure that the quality of work represented by the new degrees shall be in no wise inferior to that represented by the regular degrees. In my judgment we should still maintain an inquiring attitude regarding these special degrees in Education.

BUREAU OF EDUCATIONAL SERVICE

On December 8, 1931, the Committee on General Administration approved the establishment of a Bureau of Educational Service under the auspices of the Graduate School of Education. The function of the Bureau is conceived to be as follows: to act as a central office of record involving the collection and filing of the credentials of the registrants and the transmission of these credentials to prospective employers, for the purpose of making more easily available the services of our variously trained candidates; to attempt to build up a state and national clientele through contacts on the part of the Secretary of the Bureau and the various staff members, and through dignified publicity; to follow the professional careers of Cornell graduates and to aid them in securing deserved advancement; and to make reports from time to time showing the success or failure of placement in terms of supply and demand in various fields and at various levels.

A study was made of the personnel records and practices of larger university offices. On the basis of this study forms suited to the local situation were devised and printed, and registration of candidates commenced January 15, 1932. As of June 15, 1932, the total registration on the new forms is 302, classified as follows:

Seniors—132				Graduate students—149						Graduates—30			Total 302
	Acad. Sub.	H.E.	Voc. Agr.	Acad. Sub.	Ed.	H.E.	Voc. Agr.	In res.	In field	New Reg.	Re- news		
Men....	19	—	16	39	34	—	7	44	36	6	10		131
Women.....	63	—	—	45	2	13	—	39	21	4	10		171
Total	82	34	16	84	36	13	7	83	57	10	20		302

In view of the fact that college and university placement has been almost non-existent this year, it is interesting to note that 81 of our 140 graduate students met the certificate requirements of the state for public school teaching; of these not more than fifty per cent. are interested in secondary or public school teaching. Furthermore, there has been no opportunity to advertise widely among Cornell people the establishment of the Bureau, and there is no restriction as to who may register except that the registrants must be Cornell students or holders of Cornell degrees.

The Secretary has circularized the following groups of employers during the year, indicating the nature of the Bureau and calling attention to our candidates for positions in various fields. A circular letter was sent to all principals and superintendents of public schools in New York State, to a selected list of colleges and private schools in the East, and to heads of departments of philosophy in the colleges and universities of the country.

The response to this circularization has been gratifying, particularly in the public school field. Although only about three-fourths the number of calls have been received from secondary schools this year as compared with the average over an eight-year period, many of these calls came as a direct result of the circular letter and the great majority of them were from public schools. A sufficient number of replies were received from the circularization of private schools, colleges, and departments of philosophy, to indicate little or no demand for teachers in private secondary schools or at the college level.

The Secretary reports splendid cooperation on the part of practically all members of the staff in notifying the Bureau of vacancies, assisting in making nominations through their intimate knowledge of the students, promptly answering requests for endorsements of candidates, and in many other ways which insure the success of teacher placement. The cooperation and assistance rendered by those in charge of the special training of teachers should be particularly noted.

Exact statistics are not available covering the placement of teachers for the college year, due to the late organization of the Bureau and to the fact that the college year does not coincide with the active placement period. Yet from data on hand the Secretary reports a success fully comparable to that of institutions training similar groups of teachers.

It is hoped that in time the Bureau will have on file complete records of all Cornell graduates engaged in teaching. To this end all Cornell graduates are urged to write the Secretary of the Bureau. The service of the Bureau is free to all seniors and graduate students in residence. In order to cover the necessary expense of printing and mailing forms, collection, filing, and transmission of credentials, a fee of two dollars is charged for registration of holders of Cornell degrees and matriculants for degrees not in residence.

JULIAN E. BUTTERWORTH,
Director of the Graduate School of Education.

APPENDIX XIV

REPORT OF THE ADMINISTRATIVE BOARD OF THE SUMMER SESSION

To the President of the University:

SIR: On behalf of the Administrative Board of the Summer Session I have the honor to report as follows for the session of 1931:

ATTENDANCE

	<i>Men</i>	<i>Women</i>	<i>Total</i>
In Summer Session.....	838	620	1458
In Summer School of Agriculture....	489	506	995
	1327	1126	2453
Less Double Registrants.....	52	57	109
	1275	1069	2344
Summer Session of Law.....	95	1	96
	1370	1070	2440

ANALYSIS

Graduate Students in S. S....	192	204	396
Graduate Students in Agriculture..	70	35	105
Graduate Students in Both....	58	29	87
	320	268	588

OF SUMMER SESSION REGISTRANTS

Undergraduates of Cornell.....	171	40	211
Undergraduates of other institutions...	129	119	248
Students holding Cornell degrees..	59	60	119
Students holding degrees from other institutions..	272	183	455
Students holding Normal School degrees..	14	66	80
	645	468	1113

TEACHERS

	<i>1927</i> <i>Total</i>	<i>1928</i> <i>Total</i>	<i>1929</i> <i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>1931</i> <i>Men</i>	<i>Women</i>	<i>Total</i>
High School.....	252	220	207	94	135	229	112	161	273
Grades.....	201	162	142	16	91	107	9	92	101
Colleges.....	64	76	85	48	28	76	86	41	127
Normal Schools...	2	2	8	—	3	3	1	4	5
Superintendents....	1	4	3	3	—	3	2	—	2
Principals.....	13	10	20	13	4	17	28	8	36
Supervisors.....	7	6	5	2	4	6	3	7	10
Kindergarten....	—	—	5	—	4	4	—	6	6
Others.....	11	24	25	18	16	34	20	17	37
Junior High School.	—	31	46	5	20	25	4	16	20
Junior Colleges...	—	1	—	1	—	1	—	—	—

GEOGRAPHICAL DISTRIBUTION

	<i>1930</i>	<i>1931</i>
New York.....	1285	1379
Pennsylvania.....	249	236
New Jersey.....	93	127
Other Middle States (Including Md., D. C., Del.).	78	70
New England.....	144	140

Southern States.....		142		148
West Virginia.....	22		8	
Virginia.....	29		26	
North Carolina.....	19		19	
South Carolina.....	15		17	
Georgia.....	6		11	
Florida.....	15		12	
Alabama.....	1		3	
Mississippi.....	4		9	
Kentucky.....	5		11	
Tennessee.....	6		8	
Louisiana.....	4		10	
Arkansas.....	4		4	
Texas.....	12		7	
New Mexico.....	—		3	
Central States.....		116		106
Ohio.....	50		41	
Indiana.....	14		19	
Michigan.....	23		21	
Illinois.....	29		25	
Middle West.....		44		47
Missouri.....	8		12	
Kansas.....	5		3	
Wisconsin.....	2		7	
Minnesota.....	4		8	
Iowa.....	12		4	
Nebraska.....	2		4	
Oklahoma.....	10		9	
Wyoming.....	1		—	
North Western and Pacific Coast.....		27		18
South Dakota.....	1		—	
North Dakota.....	1		—	
Montana.....	3		1	
Colorado.....	5		2	
Utah.....	2		2	
Arizona.....	—		—	
Washington.....	1		—	
Oregon.....	2		2	
California.....	12		8	
Idaho.....	—		3	
Foreign Countries.....		97		73
		2291		2344

SUMMER SESSION ATTENDANCE BY COURSES

	1925	1926	1927	1928	1929	1930	1931
Anthropology.....	—	—	—	—	—	—	15
Architecture.....	—	—	—	17	24	19	23
Astronomy.....	21	22	19	24	14	16	27
Chemistry.....	211	201	205	213	264	255	260
Drawing and Painting.....	67	54	59	107	83	67	86
Economics.....	288	243	252	210	242	227	222
Education.....	434	500	365	388	373	375	410
Engineering.....							
Drawing.....	7	15	10	11	4	5	4
Descriptive Geometry.....	35	35	38	29	20	19	17
Kinematics.....	34	25	20	20	29	18	11
Materials of Construction.....	—	—	26	29	32	33	25
Mechanics.....	92	83	92	88	75	71	75
Hydraulics.....	16	22	27	14	23	22	18
Structural Engineering.....	88	96	105	111	99	94	75

SUMMER SESSION

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English.....	611	607	590	561	521	309	399
Geography and Geology.....	231	175	220	191	160	140	175
German.....	62	69	51	63	88	67	90
Government.....	46	58	40	84	41	27	30
Greek.....	—	10	5	16	26	14	11
Health Education.....	28	37	31	24	19	32	18
History.....	246	269	320	355	268	211	229
Hygiene.....	22	—	—	—	—	—	—
Latin.....	60	24	75	48	45	42	48
Mathematics.....	220	246	236	388	286	250	183
Music.....	104	122	162	106	157	76	49
Philosophy.....	120	125	115	102	76	90	64
Physical Education.....	90	113	188	107	159	138	127
Physics.....	100	129	110	114	130	148	165
Physiology and Biochemistry.....	—	—	—	—	4	12	22
Psychology.....	180	183	117	129	109	118	122
Public Speaking.....	147	183	166	163	209	148	174
Romance Languages							
French.....	210	214	202	175	182	112	151
Spanish.....	63	59	62	54	38	34	34
Photography.....	—	—	—	—	—	16	—

SUMMER SCHOOL OF BIOLOGY

Botany.....	49	61	46	67	71	59	81
Zoology.....	75	90	70	95	118	98	74
Botany and Zoology (courses dealing with both Plants and Animals)	13	32	27	19	25	16	26
	137	183	143	181	214	173	181

SUMMER SCHOOL OF LAW

First Term.....	105	84	77	96	78	86	55
Second Term.....	100	79	60	4	68	68	41
	205	163	137	100	146	154	96

COST PER STUDENT HOUR (1931)

<i>Subject</i>	<i>Student Hours</i>	<i>Cost</i>	<i>Cost per Student Hour</i>
Architecture.....	160	750	4.68
Astronomy.....	33	375	11.36
Chemistry.....	741	6075	8.11
Drawing and Painting.....	142	1525	10.74
Economics.....	428	2725	6.36
Education.....	752	5100	6.78
Engineering.....	643	7725	12.01
Engineering Drawing.....	12	\$ 750	\$62.50
Descriptive Geometry.....	33	575	17.42
Kinematics.....	29	750	25.86
Mechanics.....	263	2250	8.56
Materials of Construction..	75	750	10.00
Hydraulics.....	56	750	13.38
Structural Engineering.....	175	1900	10.85
English.....	742	4800	6.47
Geography and Geology.....	295	4100	13.89
German.....	198	1850	9.34
Government.....	56	750	13.38
History.....	381	4125	10.82
Latin.....	78	1500	19.22
Greek.....	20	750	37.50

Mathematics.. . . .	596	6175	10.35
Music.....	90	2525	28.06
Philosophy..	90	1900	21.11
Physical Education...	115	3200	27.82
Hygiene.	29	1325	45.69
Physics.	306	3800	12.35
Physiology....	45	750	16.66
Psychology	219	2375	10.84
Public Speaking.....	294	3600	12.24
Romance Languages..	394	3825	9.70
French...	322	2675	8.30
Spanish...	72	1150	15.97
	<hr/> 6847	<hr/> \$71625	<hr/> \$10.46

It is a pleasure to report that the total registration in all departments offering Summer Session work was 2440 as against a total for the session of 1930 of 2385, and of 1929 of 2415. This is the largest total attendance in recent years. The effect of the economic depression was, however, felt in the registration of the Summer Session proper, the figure this year being 1458 as compared with 1513 for 1930. The most notable increase was in the Summer Session of Agriculture with 995 students enrolled as against 888 for 1930. The decrease in the Summer Session was most marked in the undergraduate enrollment, following a gradual decrease in recent years. The undergraduates of Cornell were 211 for 1931 as against 239 for 1930 and the undergraduates of other institutions 248 as against 294 for 1930. There was a marked increase in the number of graduate students registered, 588 as against 460 in 1930. Students holding Normal School degrees again showed a falling off, following the trend of recent years as has been explained in past reports. The number of students holding Cornell degrees again increased from 107 in 1930 to 119 in 1931 following the trend of recent years. The number of teachers in attendance showed a gratifying increase being 617 for 1931 as against 505 for 1930. The number of men teachers in attendance again increased as has been noted in recent years, from 200 to 265. The falling off in the number of women teachers was checked, there being an increase in 1931 of 47 over 1930. In general it should be noted that the falling off in the general Summer Session and the increase in the New York State Summer Sessions probably represent the effect of the economic depression, in that many students found that the offering of the Summer Session of Agriculture would meet their needs while giving residents of New York State the advantage of almost free tuition. The very attractive offerings of the New York State Summer Sessions are naturally bringing an increase in students, but undoubtedly the financial situation has played a considerable part. The custom of presenting a very limited number of joint offerings whereby the two sessions have divided expenses of instruction is an index of this fact. In three courses in Education offered in this way it was notable that the number of students from the New York State Summer Sessions registered in these courses bore a ratio of 2 to 1 over those registered in the Summer Session proper. It raises definitely the question of the advisability of such joint courses being offered at all if the budget of the Summer Session is to be maintained. The decrease of undergraduates in attendance may be attributed both to the economic depression and to the general trend which holds not only at Cornell, but at other principal Summer Sessions. Every summer shows an increase in the maturity and earnestness of our student body and this was particularly marked in the 1931 session. The personnel of the entire student body was unusually high and was commented on, not only by instructors, but by many of the students themselves, especially those who had returned after an absence from the campus of some four or five years. It is our confident belief that this fine tone of our Summer Session is making many friends for us and is increasing our popularity generally. There are, however, serious questions involving our budget which will be discussed in the annual request for budget to be presented later in the autumn.

The table of Geographical Distribution also reflects somewhat the current depression in that there was a slight falling off of attendance from parts of the United States far distant from Cornell, and increase in the attendance from the nearby states. The table listing attendance of courses shows the usual fluctuations from year to year, the most marked of these for our older courses being the unexplained falling off in the Department of Mathematics which is probably only a spasmodic fluctuation, possibly accounted for by a somewhat smaller registration of Engineering students. Of the newer offerings the courses in Physical Education showed a decrease and this indicates the necessity for a readjustment of the offering in that field. The enrollment in the Department of Music was also disappointingly small and will probably show a necessity for a similar readjustment. The falling off of the attendance in Philosophy is also probably only temporary. On the other hand there were gratifying increases in other departments, notably Education, English, Geography and Geology, and Drawing and Painting. The offering in Physiology involving the study of the Conditioned Reflex attracted a sufficient number of students to justify the admission of this subject to our program. It should be noted that there was a slight increase in the attendance on the Summer Session of Biology.

The table covering cost per student hour for each department shows a general increase in this cost from \$10.08 for 1930 to \$10.46 for 1931. This is in line with the trend of recent years involving larger graduate and smaller undergraduate enrollment and was further increased by the promotion in rank of a considerable number of our regular Summer Session instructors involving higher cost for identical services rendered. It is increasingly evident that the trend toward graduate instruction in Summer Session is a question to be faced frankly and that, although every effort will be made to readjust the budget of 1932 to meet this tendency without further increase, yet it must be recognized that with a better financial situation throughout the University will come an inevitable demand for extension of our graduate work with correspondingly higher cost.

With the formation of the Graduate School of Education will come an imperative need for extending the offering in that field in the Summer Session. The number of persons registered for advanced degrees under the auspices of the new Graduate School in the session of 1931 was very marked and it is a pleasure to report that these students seemed uniformly pleased with the offering. There is no question but that the Summer Session will play a large part in strengthening the hold which the new School expects to secure upon the teachers not only of New York State, but of the country at large. It is extremely important to continue to make this offering attractive and this will involve the bringing to our campus for summer work men of recognized reputation in the educational field to supplement the work of our regular staff. This will involve a somewhat larger budget than has held in the past and although we expect to get through the summer of 1932 without increase in the budget for Education, yet we shall have to meet a more insistent demand for increased offerings in 1933 and 1934 if the present increase in enrollment continues. Since, however, the cost per student hour in Education is lower than in almost every other field we are justified in increasing that offering to a greater extent than if our student hour cost were higher. It is probable that with reductions in other directions this demand can be met satisfactorily.

One very interesting experiment proved successful in the joint invitation of the Summer Session and the New York State Summer Sessions to the Attendance Officers of the State of New York to meet in Ithaca for a week of conference, directed by the New York State Department of Education. This was well attended and was extremely successful. It is believed that it is one of the functions of our Graduate School of Education to encourage such conferences especially when the cost to the session is very small. A sum of \$150 was appropriated by the Summer Session and matched by a similar appropriation by the New York State Summer Session. This proved entirely adequate to meet the expense of the meeting.

An interesting index of the character of the Summer Session enrollment is found in a report submitted to the Chairman of the Summer Session by Mr. E. R. B. Willis of the University Library. The number of books taken out for home use by Summer Session students was 5,110, an increase of 500 over 1930 and the largest number ever drawn for this purpose except in the summer of 1925 when the number was slightly larger. The number of books on reserve was 603, which has been surpassed only once in the past ten years, namely in 1927. The number of books used in seminary was 996, more than double the number of 1930 and far above the nearest figure of 615 for 1925.

The proposed two weeks field trip in Geography and Geology sanctioned by the Board of Trustees had to be abandoned owing to an insufficient registration. It created a great deal of interest, but the actual number registering was somewhat short of the minimum number necessary. The interest shown was sufficient to warrant the belief that with a relief from current economic pressure such a trip would be entirely successful.

It should be noted that your Chairman was honored by the National Association of Summer Session Directors at their meeting in Madison, Wisconsin, in 1930 by being elected President of the Association for the year 1930-31. He will preside at the meeting to be held at the University of Virginia on October 30 and 31 of this year.

It should be noted that the increasing complexity of Summer Session problems will require the exercise of the utmost care in their solution and makes even more necessary than before the combined counsel and advice which has marked the relations of all concerned in the past. There is every ground for optimism in the fact that we have maintained our general enrollment in the face of discouraging financial conditions and every reason to feel that the session of 1932 will be equally successful. The encouragement of the President and the Board of Trustees is extremely gratifying to your Administrative Board and we shall continue to welcome any suggestions making for the welfare of the session.

R. H. JORDAN,
Chairman of the Summer Session.

APPENDIX XV

REPORT OF THE DEAN OF WOMEN

To the President of the University:

SIR: I have the honor to submit herewith the report of the Dean of Women for the year 1931-32.

The housing of the women students was satisfactorily taken care of during the year with the use of the six dormitories—Balch Halls, Prudence Risley Hall, Sage College,—and the fourteen sorority houses and the University Cottage at 308 Wait Avenue. The enrollment was the same as the previous year. All dormitory Head Residents returned from the previous year, namely: Miss Gertrude Nye at Risley, Miss Grace Seely at Sage, Miss Mary E. Cornell at Balch Unit I, Mrs. Carolyn Powell at Balch Unit II, Mrs. Maude Biggs at Balch Unit III, Mrs. Mable Conger at Balch Unit IV. A graduate student, Miss Maxine Alverson, chaperoned at 308 Wait Avenue, and the residents of this cottage boarded at Prudence Risley Hall. The effect upon the girls of the life in the dormitories and the possibilities for general social development is evident and gratifying. The general atmosphere maintained by students and administrative officials is one of good taste and friendly cooperation. Herewith appended are the tables of registration by colleges of the women students of Cornell University:

REGISTRATION FIGURES BY COLLEGES, 1931-32

		First Semester								
<i>Total</i>	<i>Class</i>	<i>Arts</i>	<i>H.E.</i>	<i>Agr.</i>	<i>Arch.</i>	<i>Eng.</i>	<i>Vet.</i>	<i>Law</i>	<i>Med.</i>	<i>Hotel</i>
324	Freshmen	191	100	29	2	1	1			
307	Sophomores	170	108	23	3	1		1		1
273	Juniors	140	104	25	2		1			1
258	Seniors	141	82	18	10			5	1	1
32	Specials	5	8	18	1					
<hr/>		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
1194		647	402	113	18	2	2	6	1	3
175	Graduates									
<hr/>										
1369										

		Second Semester								
<i>Total</i>	<i>Class</i>	<i>Arts</i>	<i>H.E.</i>	<i>Agr.</i>	<i>Arch.</i>	<i>Eng.</i>	<i>Vet.</i>	<i>Law</i>	<i>Med.</i>	<i>Hotel</i>
314	Freshmen	181	98	30	2	1	2			
295	Sophomores	157	108	23	4	1		1		1
268	Juniors	138	102	25	2		1			
226	Seniors	117	75	17	9	1		5	1	1
45	Specials	9	10	25	1					
<hr/>		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
1148		602	393	120	18	3	3	6	1	2
185	Graduates									
<hr/>										

1333

The problem of gravest concern, perhaps, for the year was the change in financial status of many students during the year. This was especially serious in the case of seniors, who until perhaps the spring of the senior year had not been obliged to have concern over their finances. Many families of previous affluence suddenly lost everything and could not supply the few hundred dollars necessary for the remainder of the year. Girls left in such situations met the conditions with courage and good spirits, and with the help of work, loans, and some few gifts, were able to finish the year. Miss Eleanor Simonds, Assistant to the Dean of Women, spent practically all of her time during the spring helping to secure work and advising in individual situations. All seniors were enabled to complete their courses and very few underclassmen found it necessary to withdraw because of lack of finances or work. Various funds were taxed to the limit to help in the emergencies and one hundred and seventeen girls profited through loans or gifts to the extent of about sixteen thousand dollars. The Women Student's Loan Fund, the Laura Osborne Memorial Fund, the Dormitory Fund, the Delano Fund, the Women's Guild Sick Fund, the Hunter Loan Fund, and the Alumnae Emergency Fund all contributed to the financial welfare of the women students during the year. In addition to these came checks most gratefully received, from the Cornell Women's Clubs of Rochester, Buffalo, Syracuse, Pittsburgh, Utica, and a check for ten dollars for each of five successive months from an individual alumna. A number of scholarships and loans from funds in the Home Economics College were also of great value in solving the problems. Since practically all of the funds were almost entirely depleted during the year, the outlook for the coming year is not bright. It will depend upon the amount repaid during the summer and early part of the year from last year's and previous years' loans. Because of conclusions based upon six years' experience this office would like to suggest that the Admissions department inquire into the financial situation before accepting an application. It seems quite difficult to impress upon some parents and prospective students that the University does not undertake to finance a student's education. As the University requires that women students live in the dormitories and only a limited number of exceptions can be made for students to earn board and room in town, this office would like to have the authority to say that no freshmen could be given such permission.

The Women's Self Government Association under the able leadership of Miss Edyth King has functioned unusually well. Their constitution committee presented some needed revisions this spring, and made some changes in the general procedure of the administration of their organization. These will simplify matters somewhat for the coming year.

The personnel of the Dean of Women's staff is the same as the previous year, the two assistants to the Dean of Women being Miss Eleanor Simonds and Mrs. Elizabeth Leonard. Mrs. Leonard has taken almost complete charge of the approval of chaperons for social affairs, and since these increase in number each year, the work has consumed an increasingly greater amount of time. She made a special study of the social affairs for the past three years which is herewith appended.

SUMMARY COMPARED WITH PREVIOUS TWO YEARS

	1929-30	1930-31	1931-32
Informal dances....	197	245	252
Formal dances...	91	114	125
House parties...	73	74	62
Other functions.	39	45	55
Total functions.	400	478	494
Number reported by organizations having houses (Fraternities, sororities, Cosmopolitan Club)...	320	382	388
Number reported by other organizations.	80	96	106
Largest number reported by one organization..	15	20	21
Number of groups reporting ten or more functions..	5	8	6
Number of groups reporting from five to nine functions	18	26	33
Number of groups reporting from one to four functions	56	44	37
Average number reported by organizations having houses.	4.05	4.89	5.1

Of the 78 organizations with houses, listed in the student directory, all but two groups reported at least one social function during the year 1931-32. Each of the 62 house parties listed, with the exception of one composed of a group of girls only, had from two to four dances, which would make the total number of dances at house parties between 175 and 200 and the total number of individual social functions for the year around 650. It may be noted that some organizations may have had social functions which were not reported in this office. A fraternity having a house party or dance which no Cornell women attended would not be obliged to report it to this office, although they occasionally did so. Social functions where no chaperon was required, or those which only women attended, or which did not require a special notice are not included in this list. It may also be noted that the seeming increase each year may mean not only that more dances were given but that more were reported.

Mrs. Leonard has also had charge of the individual student records and has compiled an interesting tabulation of Comparative Decile Ratings of the women students entering the various colleges of the University in the fall of 1931, which is as follows:

COMPARATIVE DECILE RATINGS OF WOMEN IN VARIOUS COLLEGES IN
CORNELL UNIVERSITY

FALL, 1931

	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Agriculture....	2	3	1	3	4	2	1	3	2	6	27
Home Economics....	7	8	13	14	10	15	9	19	10	12	117
Arts and Sciences..	29	32	26	21	20	30	12	17	19	6	212

Percentage in:

Deciles I-III Deciles IV-VII Deciles VIII-X

Agriculture....	22%	37%	40%
Home Economics.....	24%	41%	35%
Arts and Sciences.....	41%	39%	19%

The Dean of Women offered at the first-week meeting with the freshmen women last fall to help any who wished in budgeting their time for study and recreation. About two hundred availed themselves of the offer, practically two thirds of the class. This meant an individual conference with each student and helped materially in understanding individual background, interests, emotions, and general ability. The girls who came in, thus, voluntarily, said that the schedules arranged helped greatly in carrying out the day's program, and added to health since it involved no late hours for studying.

The Summer Session of 1931 was attended by 1033 women, practically the same number as that of the previous year. All six dormitories were used, and each was presided over by its own regular session Head Resident which simplified the work of the Summer Session materially. A number of social affairs were held last summer—teas, faculty dinners, dances; and the general tone of the session was much improved over some of the previous years.

The Dean of Women found her time more than filled during the year with general supervision, and with the hundreds of personal conferences requested by students and faculty members. The work in suggesting "what to do with a college degree" was ably supplemented by a week of conferences with Miss Florence Jackson in December. Eighty girls requested personal interviews with her and her suggestions were most valuable. The present budget does not provide for a secretary so it has been necessary for the Dean of Women and both assistants to take care of the typing of their own correspondence. When the financial situation improves a full time secretary would be a saving investment.

R. LOUISE FITCH,
Dean of Women.

APPENDIX XVI

REPORT OF THE DIRECTOR OF ADMISSIONS

To the President of the University:

SIR: I respectfully submit my report for the Office of Admissions, covering entrance to the seven undergraduate colleges of the University in September 1931.

TABLE I

The following table shows the number of applications and the number admitted in September 1931 to each of the undergraduate colleges. Only those have been counted as applicants who actually filed formal applications for admission as regular students; persons indicating intent to enter, whether by letter or by interview, have not been included, nor have so-called "special students." Under "admitted" are included those who met all university requirements and the particular requirements of the college concerned and who were notified that they were entitled to matriculation as regular students—whether they afterwards registered or not.

A. Applications for entrance direct from secondary institutions:

<i>College</i>	<i>Applied</i>	<i>Admitted</i>
Arts and Sciences		
A.B.....	1003	516
B.Chem.....	92	58
Agriculture.....	445	254
Home Economics.....	254	105
Hotel Administration.....	106	48
Veterinary.....	65	50
Architecture.....	84	34
Engineering.....	482	290
Total.....	2531	1355

B. Applications for entrance by transfer with credit towards advanced standing:

<i>College</i>	<i>Applied</i>	<i>Admitted</i>
Arts and Sciences		
A.B.....	233	98
B.Chem.....	16	6
Agriculture.....	78	31
Home Economics.....	59	22
Hotel Administration.....	46	25
Veterinary.....	26	17
Architecture.....	16	6
Engineering.....	91	44
Total.....	565	249

	<i>Total Applications</i>	<i>Total Admitted</i>
1931	3096	1604
1930	3056	1498
1929	3427	1405

TABLE II

The 1355 students admitted without credit towards advanced standing (see I, A) divide as follows according to the method by which each one offered the greater part of his entrance credit:

Certificate.....	440
Regents.....	867
Examination.....	0
College Board.....	48
	<hr/>
	1355

Many of the 1355 students offered credit by more than one of the four methods. The following shows the number offering credit by any one of the four:

Students presenting credit by Certificate....	639
" " " " Regents.....	926
" " " " Examination.....	119
" " " " College Board.....	106
Schools using Certificate Privilege September 1931.....	345

TABLE III

ENTRANCE EXAMINATIONS

In September 1931 entrance examinations furnished by the College Entrance Examination Board were used for the second time. The answer-papers were read and graded by members of the Cornell Faculty.

For these examinations permits were issued to 235 individuals. Out of these 109 completed the requirements and were enabled so to enter, 107 were not admitted, and 19 were old students working off "conditions" or trying for re-entrance. The following table shows the distribution of these individuals among the colleges to which they were applying:

	<i>Made entrance</i>	<i>Not admitted</i>	<i>Total</i>
Arts.....	27	22	49
Chemistry.....	4	4	8
Architecture.....	7	4	11
Agriculture.....	19	30	49
Hotel.....	4	11	15
Home Economics.....	1	3	4

Engineering.....	47	24	71
Veterinary.....		1	1
Course not stated.....		8	8
	<hr/>	<hr/>	<hr/>
	109	107	216
Old students.....			19
			<hr/>
			235

The following table shows the number of passes and failures for each subject:

<i>Subject</i>	<i>Passing grades (60 or above)</i>	<i>Failing grades (below 60)</i>
English.....	18	12
Latin—2 yrs.	7	7
Latin 3rd.....	2	9
Latin 4th.....	1	—
French—2 yrs.....	24	13
French—3 yrs.....	8	5
French—4 yrs.....	2	2
German—2 yrs.....	1	5
German 3rd.....	2	2
Spanish—2 yrs.....	4	3
Spanish 3rd.....	1	2
Spanish—3 yrs.....	2	5
Ancient History.....	3	12
Modern History.....	—	4
American History.....	10	4
English History.....	3	4
Elementary and Intermediate Algebra.....	11	10
Algebra and Plane Geometry.....	5	4
Advanced Algebra.....	2	—
Plane Geometry.....	7	14
Solid Geometry.....	11	5
Plane and Solid Geometry.....	5	4
Plane Trigonometry.....	7	3
Physical Geography.....	3	5
Chemistry.....	6	6
Physics.....	—	7
Biology.....	7	3
Drawing.....	7	1
Manual Training.....	3	—
Bookkeeping.....	2	—
General Agriculture.....	1	—

For purposes of comparison I append the figures for the entrance examinations of September 1929, the last year when examinations made by the Cornell faculty were used, and September 1930.

	1929	1930
Total new applicants trying examinations.....	232	219
Applicants completing requirements by examination.....	112	103
Applicants trying examinations, but failing to complete requirements thereby.....	120	116
The proportion of passing grades, for all subjects, to the total number of grades reported		
1929	1930	1931
32%	32%	52%

It is encouraging to note that while the number of students who find it necessary to try the September examinations has decreased slightly, the proportion of passing grades has increased.

TABLE IV

Freshmen admitted from private schools in the United States:

	1929	1930	1931
From schools in New York State.....	50	65	83
From schools in other Middle States.....	38	35	58
From schools in New England States.....	22	22	24
From schools in other States.....	31	31	39
Total.....	141	153	204

TABLE V

The following Table shows the geographical distribution of applicants for admission to the undergraduate colleges in September 1931.

New York City.....	309	South Carolina.....	3
Brooklyn.....	305	South Dakota.....	1
Other towns in New York State.....	1650	Tennessee.....	8
		Texas.....	13
New York State.....	2264	Utah.....	4
Alabama.....	3	Vermont.....	8
Arizona.....	1	Virginia.....	9
Arkansas.....	2	Washington.....	2
California.....	28	West Virginia.....	1
Colorado.....	8	Wisconsin.....	17
Connecticut.....	78	Wyoming.....	1
Delaware.....	5	Canal Zone.....	3
District of Columbia.....	30	Hawaii.....	5
Florida.....	4	Philippines.....	1
Georgia.....	4	Porto Rico.....	4
Idaho.....	1		
Illinois.....	48	Foreign countries:	
Indiana.....	10	Austria.....	1
Iowa.....	8	Brazil.....	2
Kansas.....	4	Canada.....	12
Kentucky.....	2	China.....	2
Louisiana.....	1	Colombia, S. A.....	1
Maine.....	4	Cuba.....	1
Maryland.....	24	England.....	2
Massachusetts.....	85	Egypt.....	1
Michigan.....	21	France.....	1
Minnesota.....	6	Germany.....	1
Mississippi.....	3	India.....	1
Missouri.....	8	Japan.....	2
Nebraska.....	2	Mexico.....	1
New Hampshire.....	9	Paraguay.....	1
New Jersey.....	230	Russia.....	10
North Carolina.....	3	South Africa.....	2
North Dakota.....	1	Spain.....	1
Ohio.....	105	Sweden.....	1
Oklahoma.....	4	Switzerland.....	1
Oregon.....	2	Turkey.....	1
Pennsylvania.....	238		
Rhode Island.....	9	Total.....	3380*

*This total includes special students not included in Tables I, A and B.

E. F. BRADFORD,
Director of Admissions.

APPENDIX XVII

REPORT OF THE REGISTRAR

To the President of the University:

SIR: I have the honor to submit herewith my second annual report as Registrar of the University. The report covers the academic year 1931-32 including the Summer Session of 1931 and for convenience work between the end of the second term 1930-31 and July 1, 1931, but excluding work between the end of second term of 1931-32 and July 1, 1932.

	THE YEAR			
	<i>Days in Session</i>	<i>Sun- days</i>	<i>Vaca- tion</i>	<i>Total</i>
Summer Vacation, June 16-July 5.			20	20
Summer Session, July 6-Aug. 14.	35	5		40
Summer Vacation, Aug. 15-Sept. 27.			44	44
First term, Sept. 28-Feb. 10.	102	15		117
Thanksgiving vacation.			4	4
Christmas vacation, Dec. 20-Jan. 3.			15	15
First term vacation, Feb. 11.			1	1
Spring vacation.			8	8
Second term, Feb. 12-June 20.	104	17		121
Spring Day			1	1

*ATTENDANCE AT SUMMER SESSIONS, ETC.

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Graduate, Personal Direction	46	12	58
Graduate, 1931 SS, SS Agriculture.	349	269	618
Summer Session Law, 1st Term, 1931	59	1	60
Summer Session Law, 2nd Term, 1931	50		50
Summer Session, 1931.	841	598	1439
Summer Session Agriculture, 1931.	424	505	929
Short Winter Agriculture, 1931-32.	116	4	120
Total.	1885	1389	3274

*DUPLICATES

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Graduate School—Architecture.	1	—	1
Graduate School—Agriculture.	11	7	18
Graduate School—Engineering.	1	—	1
Graduate School—Arts.	12	10	22
Graduate School—Home Economics.	2	2	4
Graduate School—Veterinary	2	—	2
Architecture—Arts.	—	—	—
Agriculture—Arts.	4	1	5
Agriculture—Home Economics.	1	—	1
Agriculture—Veterinary.	2	—	2
Arts—Engineering.	13	—	13
Arts—Home Economics.	2	—	2
Arts—Law.	3	—	3
Arts—Medicine.	10	1	11
Engineering—Home Economics.	2	—	2
Graduate School (Personal Direction)—Graduate.	88	13	101
Graduate—Graduate.	65	33	98
Graduate in SS—Graduate (Personal Direction).	18	6	24
Graduate—Summer Session.	262	196	458
Graduate—State Summer Session.	118	21	139

*To accompany the inserted table showing attendance for the year 1931-32.

The following table shows the age in years and months at graduation for the ten year classes 1870-1930. It also shows the age separately for men and women. The Master's degrees are listed in one group and the Doctor's in another. The age at graduation of the youngest member of the graduating class and also that of the oldest member are given as well as the median age.

	Arts		Law		Medicine		Veterinary		Agriculture		Architecture		Civil Eng.		Mech. Eng.		Masters		Doctors	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Class of 1870:																				
Minimum.....	20-4																26-0			
Median.....	21-11																26-0			
Maximum.....	28-5																26-0			
Class of 1880:																				
Minimum.....	18-11	19-8															29-3			22-9
Median.....	22-3	22-2															29-3			22-9
Maximum.....	32-8	24-6															29-3			22-9
Class of 1890:																				
Minimum.....	19-9	20-11	20-1														20-7	23-5	28-10	
Median.....	22-4	23-0	22-6														24-1	26-10	29-6	
Maximum.....	32-6	27-1	30-2														29-10	31-5	30-3	
Class of 1900:																				
Minimum.....	20-0	20-6	19-6														22-0	21-11	24-0	30-8
Median.....	22-10	22-11	22-5														24-9	36-6	30-10	31-3
Maximum.....	36-3	33-8	34-4														40-2	42-0	41-0	33-0
Class of 1905:																				
Minimum.....	19-11	20-6	20-9														21-4	23-11	23-5	37-5
Median.....	22-6	22-10	23-5														23-1	29-3	31-2	37-5
Maximum.....	33-10	52-5	29-3														36-1	32-5	40-4	37-5
Class of 1910:																				
Minimum.....	20-1	20-8	20-10														21-7	29-8	23-0	26-5
Median.....	22-5	22-6	22-10														26-1	28-10	29-6	
Maximum.....	34-7	45-2	26-9														32-4	29-8	38-7	36-1
Class of 1915:																				
Minimum.....	20-1	20-0	20-5														24-6	24-7	25-6	28-2
Median.....	22-6	22-5	22-10														27-10	28-5	29-4	
Maximum.....	34-4	36-5	32-3														42-1	42-0	42-1	34-0
Class of 1920:																				
Minimum.....	16-9	20-6	20-11														21-4	20-9	24-9	25-8
Median.....	22-6	22-3	22-11														24-10	20-0	30-11	30-7
Maximum.....	33-2	44-5	29-11														51-6	47-6	49-9	45-4
Class of 1925:																				
Minimum.....	19-4	19-7	21-7														20-4	23-7	20-1	19-8
Median.....	22-0	22-0	23-8														26-8	24-11	28-8	40-2
Maximum.....	29-7	30-1	33-1														34-6	23-7	43-6	43-10
Class of 1930:																				
Minimum.....	19-7	19-5	21-5														20-7	20-1	23-6	24-2
Median.....	21-9	21-8	23-11														26-6	25-2	31-8	34-5
Maximum.....	27-2	31-6	33-12														57-11	43-6	50-4	52-1

Summer Session—State Summer Session.....	116	62	178
Summer Session—Arts.....	101	38	139
Summer Session—Agriculture.....	8	1	9
Summer Session—Home Economics.....	4	3	7
Summer Session—Veterinary.....	1	—	1
Summer Session—Engineering.....	136	—	136
Summer Session—Architecture.....	16	4	20
State Summer Session—Arts.....	3	—	3
State Summer Session—Agriculture.....	34	14	48
State Summer Session—Home Economics.....	—	20	20
State Summer Session—Veterinary.....	1	—	1
State Summer Session—Architecture.....	3	—	3
I Summer School Law 1931—Arts.....	1	—	1
I Summer School Law 1931—Law.....	26	—	26
I Summer School Law 1931—SS.....	1	—	1
II Summer School Law I—SS Law.....	26	—	26
Summer School of Law II—Arts.....	1	—	1
Summer School of Law II—Law.....	18	—	18
SS Agr. and Winter Course.....	1	—	1
Grad. ISS Law.....	1	—	1
Grad. (P.) & SS.....	4	1	5
SS and M.D.....	1	—	1
Total.....	1122	433	1555

MATRICULATES

The following table shows that 2045 students have registered during the present year for the first time. The table also shows the methods of admission. Students entering for the first time in the Summer Session and in the State Summer Schools are not considered as matriculates, but for convenience are listed in this table.

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Graduate.....	273	176	449
Advanced Standing.....	143	62	205
First Year.....	1060	207	1267
Special Students.....	30	9	39
2 Year Agriculture Special.....	33	—	33
Medicine (New York City).....	48	4	52
Summer Session 1931.....	247	289	536
State Summer Session 1931.....	131	249	380
Summer Graduate (Personal Direction).....	6	1	7
Summer Law.....	12	—	12
Totals.....	1983	997	2980
Duplicates.....	95	80	175
Net Totals.....	1888	917	2805

FIRST DEGREES

September, 1931; February, 1932; and June, 1932.

	<i>Men</i>	<i>Women</i>	<i>Total</i>
A.B.....	250	140	390
B.Chem.....	19	—	19
B.S. (a)*.....	114	22	136
B.S. (b).....	—	69	69
B.S. (c).....	28	—	28
LL.B.....	43	3	46
D.V.M.....	44	—	44
B.Arch.....	19	1	20
B.L.A.....	4	—	4

*a, means Agriculture; b, Home Economics; c, Hotel; d, War Alumnus.

C.E....	62	—	62
M.E....	102	—	102
E.E....	38	1	39
M.D....	53	7	60
W.A. (d)...	2	—	2
Totals....	778	243	1021

ADVANCED DEGREES

	<i>Men</i>	<i>Women</i>	<i>Total</i>
A.M.....	52	59	111
M.S.....	70	14	84
M.S. Agr....	3	—	3
A.M. in Educ.....	3	2	5
M.S. in Educ....	2	3	5
M. in Forestry ..	2	—	2
M. Chem....	2	—	2
M.Arch.....	3	1	4
M. Fine Arts.....	0	0	0
M.C.E.....	9	—	9
M.M.E.....	7	—	7
Ph.D.....	110	23	133
M.E.E.....	11	—	11
Totals.....	274	102	376

The inserted table gives the number admitted to graduation. Care has been taken to discriminate between closely allied degrees, but such have been grouped so as to show at a glance the number in each department.

EUGENE F. BRADFORD,
Registrar.

APPENDIX XVIII

REPORT OF THE LIBRARIAN

To the President of the University:

SIR: I herewith submit the report of the University Librarian for the year 1931-1932. In the condition of the library, and the conditions under which the users of the library and the library staff have to work there have been, with one or two notable exceptions, no changes except for the worse. The most difficult problem, often adverted to in the past, is the question of space. As was pointed out in the last report of the Librarian, the apparently unlimited compressibility of books in a library building is a dangerous illusion. The seemingly slight disadvantage of numerous departures from systematic and well-ordered shelving becomes, in the long run, an increasingly costly makeshift. It consumes more and more time, energy, and labor on the part of the technical staff, and is therefore financially unsound. It places a growing strain upon the patience and efficiency of the staff and a corresponding strain on the patience and satisfaction of the users of the library. The Librarian can see no immediate remedy for this evil except the speedy erection of the extension suggested in the report of the library's interim Administration Committee of the year 1929-1930. This structure, planned to fill the space outside the Southwest angle of the present building, would relieve for a time the almost prohibitive congestion of the library as it now stands. Its erection could not be regarded as a permanent solution of the problem. Only an adequate, new, modern building could bring the University Library to a position commensurate with the development of the University as a

whole. Even if a new building were assured in the near future, the erection of the proposed extension would be a matter, if not of absolute necessity, at least of expediency, of highly desirable improvement, and of ultimate economy.

The most important subject for comment among the events of the past year is an action which had a marked effect upon some of the conditions which were summed up in the Librarian's last report in the word "inadequate." In some other college and university libraries similar problems and conditions have met with a partial solution or amelioration by the combined action of a group of well-wishers, alumni and others, who constituted themselves, by formal organization, an "Association of the Friends of the Library." The financial and the moral support of these Friends have done much in such institutions to start their libraries on a career of renewed vigor and prosperity. No such Association has as yet been formed for the Cornell University Library. But the Librarian records with sincere gratitude and extreme pleasure an action which has done much to relieve the despair of those who realize the condition of the library, and the difficulties under which the faculty, the students, and the library staff labor.

At the beginning of the year the Cornellian Council formally requested the President and the Board of Trustees to set aside from the funds contributed to the University through the Cornellian Council by the Alumni, the sum of five thousand dollars for the especial use of the Library. The Trustees acted upon the suggestion and the Library thereby benefited more than by any single action since the bequest of the Loewy Collection in 1924. All those who were concerned in this action were true "Friends of the Cornell University Library." To the Alumni, from whom in the last analysis the gift came, the Library and all who are interested in its welfare, owe a special debt of gratitude. The acquisition of many important works which would otherwise have been beyond our reach, the continuation of series which would otherwise have been dropped, the filling in of gaps which would have remained open, all these benefits flowed from this gift of grace.

In spite of, perhaps even because of, the adverse financial circumstances which have overshadowed our country during the past year, it is devoutly to be hoped that the action, so auspiciously begun, may not be allowed to remain merely a momentary flash of light, a disconnected gesture. Its continuation, even though the financial depression may necessitate curtailment, will do more to encourage hope, to stave off retrogression or stagnation, to make possible wise planning for the immediate future, than anything except a large increment to the Library's endowment.

With the aid of a part of the special appropriation, certain cataloguing difficulties, arising from the inadequacy of the cataloguing staff, long a matter of anxiety and hope deferred, were surmounted. The extra help thus secured has been made permanent through the action of the Board of Trustees which includes this post for the future in the ordinary library budget. Beside this there has been no significant change in the library staff.

During the year two special exhibitions were arranged in the cases in the main vestibule of the library building. The date, November 11, 1931, marked the centenary of the birth of Willard Fiske, who in 1868 became the first Librarian of Cornell. Fiske was not only a librarian but an enthusiastic collector of books. The remarkable collection of books by and about Dante, and a similar Petrarch collection made by Fiske in Italy where he lived after his retirement from the librarianship of Cornell in 1883 were bequeathed to the library, as were also an equally remarkable Icelandic collection, and smaller Rhaeto-Romanic and Runic collections. A very large part of the present library endowment is likewise a Fiske bequest. The Centenary was commemorated by a display of books and pictures, taken in part from the Fiske Collections. Fiske's own works on chess, significant letters, photographs and other biographical material were included in the exhibit.

The second exhibit was connected with the Bicentennial celebration of the birth of George Washington. Editions of Washington's writings, standard biographies and bibliographies, reproductions of portraits of Washington and his family, curious books about Washington, made up the bulk of the material. But far more important was the showing of a number of the priceless Washington

autographs owned by the Library. They included a group of early surveying exercises beginning with his 14th year, letters written by and to Washington, maps of the Revolutionary period annotated by the Commander-in-chief, a four page document of his later years setting forth the terms under which he was willing to let his farm lands at Mount Vernon, of great interest for its remarks on crop rotation and the use of slaves, and a small collection of autograph signatures from his 12th year to the fourth day before his death.

ACCESSIONS

General and Special Collections

	Volumes added	Present extent
General Library	12,823	623,082
Fiske Dante Collection	159	10,252
Fiske Petrarch Collection	51	4,367
Fiske Icelandic Collection	433	19,476
Wason Chinese Collection	631	19,578
Wordsworth Collection (Gift of Victor Emanuel)	120	2,379
Cornell University Theses	543	9,386
Philological Seminary Collection	9	1,118
Philosophical Seminary Collection	13	987
German Seminary Collection		769
French Seminary Collection		24
Latin and Greek Seminary Collection		326
American History Seminary Collection	2	656
Manuscripts	11	903
Cornell University Maps and Plans		202
Maps	21	1,134
U. S. Coast Survey Charts		950
U. S. Geological Survey Topographical Sheets	87	3,592
U. S. Geological Survey Atlases	1	216
British Geological Survey Maps		600
College of Architecture Library	107	2,083
Barnes Hall Library	89	3,386
Chemistry Library (special)	43	289
Comstock Memorial Library	23	1,410
Economics Laboratory Collection		340
Entomological Laboratory Collection		2,403
Forestry Library		1,881
Flower Veterinary Library	429	9,624
Goldwin Smith Hall Library	56	3,413
Gray Memorial Library	57	721
Hart Memorial Library		4,712
Kuichling Engineering Library	15	2,159
Rockefeller Hall Library	1	1,187
Van Cleef Memorial Library (medical)	181	3,652
New York State College of Agriculture Library	3,927	70,071
Law Library	1,964	70,065
Total		877,393

Miss Ingersoll, the head of the Order and Accessions Department, reports that the total of accessions to the University Library for the year amounts to 15,154 volumes. Volumes numbering 12,823 were added to the general collections in the central building. Of these 6,357 were purchased; 6,486 were received by gift or exchange. The number of gifts includes 1,300 volumes not hitherto accessioned, from the Loewy Collection. Additions to the special collections amounted to 2,331 volumes.

The following sets of periodicals were added during the past year:

- Die Naturwissenschaften v. 1-14, 1913-26.
 Journal des Scavans (Amsterdam) v. 1-50, 1769-1711.
 Videnskabselskab of Oslo. Skrifter 1894-1929.
 Schweizer Archiv für Neurologie und Psychiatrie v. 1-20, 1917-27.
 Zeitschrift für schweizerische Geschichte v. 1-9, 1921-29.
 Le Tour du Monde 1860-1895.
 Annales de Géologie et de Paléontologie v. 9-56, 1891-1930.
 Internationales Archiv für Ethnographie v. 1-31, 1888-1931.
 Société d'Anthropologie de Paris. Bulletin 40 vols. 1860-1902.
 Annales télégraphiques v. 1-8, 1858-65.
 Zeitschrift für Säugetierkunde v. 1-5, 1926-30.
 Australasian Assoc. for the Advancement of Science v. 1-14, 1887-1913.

Interesting additions among the gifts are noted in the last section of this report.

CATALOGUE DIVISION

Miss Speed, the head of the Catalogue Division, submits the following figures:

Volumes and pamphlets catalogued	15,947
Maps catalogued	183
Mss. catalogued	37
Titles added to the catalogue	8,817
Typewritten cards added	15,020
Printed cards added	13,216
Cards added to Library of Congress depository catalogue	69,108
Cards added to Harvard catalogue	112
Additions to cards	5,745
Volumes recatalogued	302
Cards corrected or dated	4,932

CLASSIFICATION AND SHELF DIVISION

Books classified	10,036
Books reclassified	30
Number of presses added	7
Presses moved	856

Mr. De Grassi, Classifier and Supervisor of shelves reports that the number of volumes missing from shelves is smaller than usual. The decrease was especially notable in the departmental and laboratory collections. The disproportionately large number of presses which had to be shifted is due to the congested condition of our stacks, stressed in the introduction to this report.

PERIODICAL DIVISION

Periodicals received, current

By subscription	1,343
By gift	1,164

Of these periodicals 701, numbering 3,478 volumes are kept on open shelves Of these 585 were loaned for brief periods of home use.

The annual "List of Publications of University Officers" was prepared, as usual, by Miss Leland, in charge of the Periodical Division.

READERS' DIVISION

Days open to the public	309
Registered borrowers	
Faculty	793
Students: College year	2,019
Summer school	266

Recorded use (Number of books)

Reading Room	107,338
Seminary Rooms	4,557
Laboratories and Departments	2,057
Home use	66,864

These figures, provided by Mr. Willis, Associate Librarian, who is in charge of the Reading Room and of Inter-library loans, show that the number of users of the Library has increased greatly.

By a change in the administrative rules of the University the special library deposit required of students is now handled in a different manner. The last year in which the old system was used was the year 1926-27. During the four succeeding years each new class entered under the new provisions. Since 1930-31 all classes work under the new rule. The students have availed themselves of the library privilege in correspondingly greater numbers. For the last year of the old system the number of student registrations for library cards was 890. For the year 1931-32 the number was 2019. The increase amounts to more than 126 per cent. This has placed an almost overwhelming strain upon the inadequate recording and clerical staff of the Reading Room.

Of the numbers cited for home use, 8,724 were from the continually popular section of "seven-day" books. This is almost twice as many as last year. Of the University Library's books 44,613 are deposited on more or less permanent loans to Departments and Laboratories.

INTER-LIBRARY LOAN

Loaned to other libraries	1,077
Borrowed from other libraries	283

University, college, public and corporation libraries to the number of 135 borrowed from Cornell. Of the loans 151 were sent to the New York State Agricultural Experiment Station at Geneva, a part of Cornell University. Among the other libraries to which books were sent are the following:

University of Rochester.	70	Dartmouth College.	21
Syracuse University	54	Yale University	17
St. Lawrence University.	44	General Electric Company.	14
Columbia University.	34	Ohio State University	11
University of Michigan.	33	University of Chicago.	9
Hamilton College.	30	Brown University	8
University of Buffalo.	29	Duke University.	6
University of North Dakota.	26	Johns Hopkins University.	6
Eastman Kodak Company.	22	Princeton University.	6
Wells College.	22	University of California.	5
E. I. DuPont de Nemours Co.	21	Massachusetts Institute of Technology	5
University of Rochester Medical School.	21	McGill University	4
		Harvard College.	3

We borrowed books from 36 other libraries. Our heaviest indebtedness is, as usual, to the Library of Congress.

Library of Congress.	89	U. S. Army Medical Library.	8
Sibley Musical Library (University of Rochester).	46	Missionary Research Library.	7
Columbia University	36	University of Chicago.	6
Yale University.	21	University of Michigan.	5
Harvard College.	14	Brown University.	3
Princeton University.	9	University of Rochester.	3
		Catholic University of America.	3

SPECIAL COLLECTIONS

The figures for additions and present extent of the special collections are given in the general table included in the report of the Accessions Department.

Of the 631 books added to the Wason Chinese Collection as reported by Miss Gaskill, the Curator of the Collection, thirteen, numbering 299 volumes, were works in Chinese. Two of these are of special interest: "The collected works of Chang Chih-tung" in 120 volumes, received through the kindness of Mr. T. L. Yuan, Acting Director of the National Library at Peiping; and the "Yüeh hai kuan chih" or history of the Canton Customs Administration, in thirty volumes, which was secured for the Collection together with several other works, by Dr. Chan Wing Tsit and Dr. Helen Gilroy of Lingnan University, Canton. Other interesting accessions were:

Mailla, J. A. M. Moyriac de, translator

Histoire générale de la Chine. 1777-85, 13 vols.

Doré, Henri

Recherches sur les superstitions en Chine. 1911-1929, 15 vols.

Révue de l'Extrême-Orient t. 1-3 (complete) 1883-1887

Two valuable catalogues of other Chinese libraries were added: the Catalogue of the Asiatic Library of Dr. G. E. Morrison, now a part of the Oriental Library (Toyo Bunko), Tokyo, Japan; and the first volume of the "Inventaire du fonds chinois de la bibliothèque de l'Ecole Française d'Extrême-Orient, Hanoi, Indo-China." The Wason Collection now possesses all the publications of the Geological Survey of China, including the *Paleontologia Sinica*, the file of which was completed this year with the cordial cooperation of Professor G. D. Harris of the Department of Geology.

For the Dante Collection the following interesting items are named by Professor Hamilton, its Curator: The edition by Biagi, Passerini and Rostagno of the *Inferno* and the *Purgatorio* with a compilation of twenty-three famous commentaries and reproductions of many of the famous early illustrations made for these poems; H. C. Cary's translation of the *Inferno* with seven engravings by William Blake; the reprint of the "Codice Caetani della Divina Commedia" edited by G. Gelasio; and V. Zabughin's "Dante e l'iconografia d'oltre tomba: arte bizantina, romica, gotica," with 155 illustrations. This is volume 1 of the "Codici storiati di Dante nella Biblioteca Vaticana."

Especially valuable additions to the Icelandic Collection, as reported by Professor Hermannsson, the Curator, were the facsimile editions of the *Codex Wormianus* of the *Prose Edda*, and of the *Codex Regius* of the *Grágás*, the Old-Icelandic law code.

To the series "Islandica," whose author and editor is the Curator of the Icelandic Collection, a twenty-first volume has been added: "The Cartography of Iceland." It is dedicated to the memory of Willard Fiske, to mark the centenary of his birth.

GIFTS

The number of donors, who gave us the 6,486 gifts mentioned in the report of accessions, is 589. An alphabetical list of their names is appended to this report. In this list appear the titles of many journals and periodical publications. Their generous publishers or editors have greatly eased the unusually large burden which the periodical list places upon the library budget, and the Library's thanks for the aid are heartfelt and warm. The same meed of thanks is offered to those governments, national, provincial, state and municipal, which, through their various bureaus, commissions and other agencies, have sent their publications to this library. Thanks are due also to the academies, scientific and historical associations, and corporations which have been our continued benefactors.

The number of members of the Faculty who have given us either their own works or books by other authors has increased and the Library's gratitude should not be measured by the brief space of this announcement. One practice in particular should be held up for unrestricted emulation. Emeritus Professor George

L. Burr, besides donating miscellaneous volumes, has made it a practice for years past to subscribe to some half dozen historical journals, which he turns over to the University Library immediately after his first perusal, together with the Proceedings of academies of which he is a member, thus relieving us of the necessity of financing this not insignificant item. Gifts of a somewhat similar nature have been made by Emeritus Professor Walter F. Willcox and Professor A. H. Wright.

During the year we received from Mrs. R. C. Carpenter of Ithaca 830 volumes from the library of the late R. C. Carpenter, former Professor of Experimental Engineering at Cornell.

Mr. Henry J. Patten, of the Class of '84, who for a number of years has turned over to the use of the Library a portion of his contribution to the University funds, has again made possible the acquisition of a number of expensive facsimiles or of beautifully illustrated books whose cost would place them beyond the reach of our normal purchasing power. This year's purchases will make clear the nature and the significance of his benefaction.

The most striking item was the splendid and costly facsimile of the Codex Aureus of the State Library of Munich, a gorgeously decorated manuscript of the Gospels, written A. D. 871 for the Emperor Charles the Bald. Other items were:

d'Ancona, Paolo

La miniatura italiana

Arnold, Sir Thomas W.

The Islamic book; a contribution to its art and history from the vii-xviii century

Bijvanck, A. W.

La miniature hollandaise et les manuscrits illustrés du XIV^e au XVI^e siècle.

Jones, Leslie W.

The script of Cologne from Hildebald to Hermann

The Luttrell Psalter

Marle, Raimond van

Iconographie de l'art profane au moyen-age et à la renaissance . . . la vie quotidienne

Miller, Konrad

Mappae arabicae. Arabische Welt- und Länderkarten des 9.-13. Jahrhunderts in arabischer Urschrift, lateinischer Transkription und Übertragung in neuzeitliche Kartenskizzen.

Sorbelli, Albano

Storia della stampa in Bologna

Terentius Afer, Publius

Terentius. Codex vaticanus latinus 3868 picturis insignis . . . phototypice editus; praefatus est Guntherus Jachmann.

Among the other donors were:

Mrs. Charles Banfield, who gave "A pocket scrap book made in Chicago or thereabouts in August, 1847, by D. T. Tillotson, an agent of the Erie and Michigan Telegraph Company, constructed by Cornell and Speed"; and Mrs. Mary Louise Curtis Bok who presented Elbert Lenrow's edition of "The letters of Richard Wagner to Anton Pusinelli." Mr. R. F. Brand gave sixteen volumes in French. Mr. John Jay Chapman sent his: "Lucian, Plato and Greek morals." With the fourteenth volume Mrs. Elizabeth S. Coolidge continued her gift of the complete works of Claudio Monteverdi. Through Dr. Henry P. de Forest we received not only works of his own, but a number of periodicals kept during the year in the Library of the Cornell Club of New York, and passed on to the Cornell University Library at the end of the year. Dr. Luzerne Coville of Ithaca continued his gifts of former years by adding one map and a number of miscellaneous volumes of local historical interest. Mr. George E. Crothers gave his: "The founding of the Leland Stanford Junior University." Dr. N. M. Crouse of Ithaca donated: *Le Bulletin des re-*

cherches historiques, 1928-1931; Canadian Historical Review, 1928-1931; and added twelve volumes on fascism to the collection which he has built up for us in the past. From Mr. Philip Gosse came: one autograph editorial notebook of his father, Edmund Gosse; and one pen-and-ink sketch by Austin Dobson. Mr. and Mrs. William F. E. Gurley continued their long line of gifts with numerous miscellaneous volumes, including William Penn's "Fruits of solitude in reflections and maxims relating to the conduct of human life." Philadelphia, 1794; and James Riley's "Journal comprising an account of the loss of the Brig Commerce, of Hartford, Connecticut." Hartford, 1818. The Henry E. Huntington Library gave "A check list or brief catalogue of the Library of Henry E. Huntington (English literature to 1640)". From the John Rylands Library of Manchester, England, we received T. Fish's "Catalogue of Sumerian tablets in the John Rylands Library." The Library of Congress gave "Speeches and addresses of Warren G. Harding." Messrs. Cyrus H., Harold F., and Stanley McCormick donated W. T. Hutchinson's "Cyrus Hall McCormick." Mr. Cyrus H. McCormick gave his "The century of the reaper." The Manchester (Eng.) Public Libraries gave "The Manchester press before 1801. A list of books, pamphlets and broadsides printed in Manchester in the 18th century." Mme. Marcel Henry gave Marcel Henry's "Essai sur Théophile Gautier." Professor A. Martynov of the Imperial academy of Sciences at Leningrad, sent "Proceedings of the first congress of Russian zoologists, anatomists, and histologists in Petrograd, 1922." The Marinens Bibliothek in Copenhagen sent parts of volumes 83, 84, 85, 87 and 91 of the "Meddelelser om Grønland." Mr. L. J. Ragatz gave his "Colonial studies in the United States during the twentieth century." From M. A. D. Weil we received John Charpentier's "Images de France;" from Mr. William Woodford, a magnificent publication, "Cherished portraits of thoroughbred horses." Mr. Louis Rouillon donated seventy-five blue prints of Ithaca and the Cornell campus. Commander J. F. Shafroth gave his "The strategy of the Yorktown campaign, 1791." From Mrs. Preserved Smith came A. H. Thorndike's "The outlook for literature." Mr. R. W. G. Vail of the American Antiquarian Society sent his "The Ulster County Gazette and its illegitimate offspring." Mr. John P. Young presented Lindley and Hutton's "Illustrations of fossil plants," H. W. Shoemaker's "Pennsylvania deer and their horns," "History of ancient Woodbury," two volumes of Collins and Jordan's "History of Lycoming County, Pennsylvania," and, worthy of special note, twenty-three volumes of "Icones florae germanicae et helveticae." Professor Carle C. Zimmerman of Harvard donated his "Siam. Rural Economic Survey."

OTTO KINKELDEY,

Librarian.

APPENDIX XIX

PUBLICATIONS 1931-32

The University Library keeps alphabetically arranged the publications of University Officers, so far as received at the Library, and for this purpose copies are solicited. Omissions in the following list are due to incomplete information.

- Cornell University.** Official publication. v. 23, 1931-32.
Cornell University. Agricultural Experiment Station. Bulletin. Ithaca, N. Y. No. 526-27, 529-538, 1931-32.
 ———— *Memoirs.* Ithaca, N. Y. No. 137-141, 1931-32.
Cornell University. College of Architecture. Report of the Dean. 1930-31. *Cornell University. Official publication v. 23, No. 6. Appendix XI. 1931.*
Cornell University. College of Arts and Sciences. Report of the Dean. 1930-31. *Ibid. v. 23, No. 6. Appendix III. 1931.*
Cornell University. College of Engineering. Report of the Dean. 1930-31. *Ibid. v. 23, No. 6. Appendix XII. 1931.*
Cornell University. Director of Admissions. Report. 1930-31. *Ibid. v. 23, No. 6. Appendix XV. 1931.*
Cornell University. Law School. Report of the Dean. 1930-31. *Ibid. v. 23, No. 6. Appendix IV. 1931.*
Cornell University. Dean of Women. Report. 1930-31. *Ibid. v. 23, No. 6. Appendix XIV. 1931.*
Cornell University. Graduate School. Report of the Dean. 1930-31. *Ibid. v. 23, No. 6. Appendix II. 1931.*
Cornell University. Library. Report of the Librarian. 1930-31. *Ibid. v. 23, No. 6. Appendix XVII. 1931.*
 ———— Publications (by Cornell University and its officers). 1930-31. *Ibid. v. 23, No. 6. Appendix XVIII. 1931.*
Cornell University. Medical College. Report of the Dean. 1930-31. *Ibid. v. 23, No. 6. Appendix V. 1931.*
Cornell University. Medical College, Ithaca Division. Report of the Secretary. 1930-31. *Ibid. v. 23, No. 6. Appendix VI. 1931.*
Cornell University. President. Annual report. 1930-31. *Ibid. v. 23, No. 6. 1931.*
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